



## Letter of Transmittal

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To: Mr. Craig Zeller, Environmental Engineer      Date: 11/19/02  
US EPA, Region IV      Project No.: 00-70923 09  
Atlanta Federal Center      Subject: *Twelve Mile Creek Sediment Transport  
Model/Data Collection Report -  
Sangamo Weston, Inc. - Operable  
Unit 2, Pickens County, South  
Carolina, November 2002*  
61 Forsyth Street, SW  
Atlanta, GA 30303

A handwritten signature in black ink that reads "Michael B. Parker".

Prepared By: Michael B. Parker, P.E.

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Please find enclosed three copies of the *Twelve Mile Creek Sediment Transport Model/Data Collection Report*, November 2002, for the above referenced location. The project activities were completed per the *Twelve Mile Creek Sediment Transport Model/Data Collection Workplan*, July 2002, revised August 2002

### Enclosure

cc. Mihir Mehta, SC DHEC (2 copies)  
Stephen Scott, COE (1 copy)  
Diane Duncan, US Fish & Wildlife (2 copies)  
Clifford Kirchof, Schlumberger (2 copies)  
Greg Mitchell, RMT (1 copy)  
Central Files

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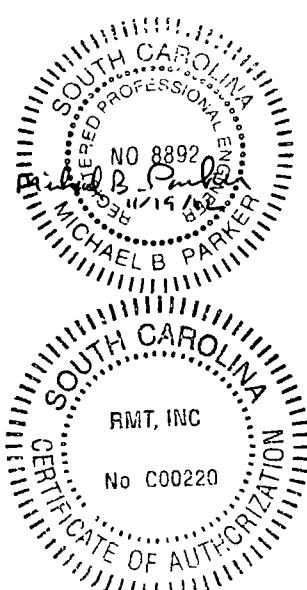
# **Twelve Mile Creek Sediment Transport Model/Data Collection Report**

**Sangamo Weston, Inc.  
Operable Unit 2**

*Pickens County, South Carolina*

**November 2002**

*Prepared For  
Schlumberger Technology Corporation*



Greg S. Mitchell  
Greg S. Mitchell  
Project Engineer

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Michael B. Parker, P.E.  
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RMT, Inc. | Sangamo Weston, Inc.  
Data Collection Report

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# Section 1

## Background

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In 1994, the United States Environmental Protection Agency (USEPA) issued a Record of Decision (ROD) for the Sangamo Weston, Inc. (Sangamo)/Twelve Mile Creek/Lake Hartwell Polychlorinated Biphenyl (PCB) Contamination Superfund Site-Operable Unit Two (Sangamo, OU-2 Site) in Pickens County, South Carolina. The ROD addressed the sediment, surface water, and sediment transport pathways from the Sangamo plant, a former capacitor manufacturing facility. Among other components, USEPA's selected remedy relied on natural sedimentation processes to cover PCB-impacted sediments downstream, thereby mitigating the transfer of PCBs from sediment to higher trophic levels. Natural sedimentation was chosen due to results of sediment transport modeling (HEC-6) conducted by the United States Army Corp. of Engineers (ACOE), Waterways Experiment Station (WES), during the remedy development in 1993/1994. Results from the modeling efforts indicated a good rate of "clean" deposition in areas of the Twelve Mile Creek Arm of Lake Hartwell.

A portion of the sediment transported in Twelve Mile Creek is trapped in the reservoir areas behind three small dams known as the Easley Central Water District Reservoir, Woodside I, and Woodside II dams. The Easley Central Water District Reservoir provides the main source of water (approximately 1.5 million gallons per day [mgd]) for the Easley Central System. The Woodside I and Woodside II impoundments are operated by CHI Energy, Inc. for the generation of hydroelectric power. After evaluating several feasible sediment management alternatives, hydraulic dredging was initiated in October 1998 at the Woodside I and Woodside II reservoirs to remove clean accumulated sediment for transport downstream via the natural flows occurring in the creek. Four hydraulic dredging events have been completed through October 2002 at the two reservoirs.

In 1999, USEPA initiated a 5-year review of the ROD. One component of the review was to collect streambed and sediment characterization data to complete additional (HEC-6) modeling of the sediment transport in the Twelve Mile Creek Arm of Lake Hartwell. In mid 1999, WES developed a scope of work for the collection of data needed to support the HEC-6 modeling efforts. RMT, Inc. (RMT) was retained by Schlumberger Technology Corporation (Schlumberger) to prepare a workplan to support WES's efforts. In August 1999, USEPA approved the data collection workplan titled *Twelve Mile Creek Sediment Transport Model/Data Collection Workplan*. The work was completed per the approved workplan and was reported in a December 1999 report titled *Twelve Mile Creek Sediment Transport Model/Data Collection Report*.

WES used the data to perform modeling simulations for comparison with the simulations conducted in the 1993/1994 time frame during remedy selection.

During the 5-year review process, the possible removal of the three dams was discussed. The channel geometry of Twelve Mile Creek below Woodside II reservoir has adjusted to the presence of the dams with the sediment transport limited to periodic transport through the sluice gates of the dam, tributary supply, or from dredging activities. Removal of the three dams would allow the sediments accumulated behind the three dams and individual creek reaches to migrate through Twelve Mile Creek. WES proposes to model the migration of the accumulated sediments using the HEC-6T model, a one-dimensional movable bed, bankline sediment transport model. In order to use the model, additional streambed and sediment characterization data was required. In mid 2002, WES developed a draft scope of work for the collection of data needed to support the HEC-6T modeling efforts. Schlumberger retained RMT to prepare and implement a workplan to support the data collection efforts. A workplan titled *Twelve Mile Creek Sediment Transport Model/Data Collection Workplan* was prepared and submitted to USEPA in July 2002. After initial review, USEPA requested expansion of the data collection efforts and a revised workplan was submitted in September 2002. The workplan was approved and the work activities were completed.

The purpose of this report is to present the information collected per the approved workplan.

# **Section 2**

## **Scope of Work**

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The scope of work presented in the workplan was developed per a draft scope of work provided by Stephen H Scott, Ph.D., P.E. of WES and comments from USEPA and South Carolina Department of Natural Resources (SC DNR). During the data collection work in 1999, 23 transects across Twelve Mile Creek were established from below Woodside II dam downstream to the Highway 123 Bridge in Clemson, South Carolina. The data collection project in 2002 added 11 additional transects across Twelve Mile Creek from the Woodside II dam approximately 2 miles upstream (Robinson Bridge Road [see Plate 1 in Appendix A]) To collect samples and measurements in the reservoirs behind each dam, four additional transects were installed within the reservoirs behind each dam (see Plate 1 in Appendix A). The transects provided the reference points for collection of the samples requested by WES and USEPA

### **2.1 Transect Establishment**

Eleven new transects were installed for creek bed profiles starting just upstream from the Woodside II dam and proceeding upstream for approximately 2 miles. Four additional transects were installed in the reservoir pools behind each dam for a total of 23 new transects.

#### **2.1.1 Creek Bed**

Transects in the Twelve Mile Creek bed (1C-11C) were established in the locations per the approved workplan. Rods were driven on each bank of the creek and their respective locations were surveyed. At each transect location, a sediment/creek bottom profile was manually measured across the creek (see Appendix H, Photographs) These 11 creek bottom profiles are presented in Appendix C.

#### **2.1.2 Reservoirs**

The reservoir areas behind the three dams are approximately 150 feet across Twelve Mile Creek and 200 feet to 300 feet long going upstream. Transect T1 for each reservoir was installed by locating a rod on each bank of the reservoir approximately 25 feet upstream of the respective dams. The other three transects (T2, T3, and T4) were installed equal distance upstream from T1 (see Appendix B). At each of the three reservoirs, the four transects were surveyed and creek bottom profiles were developed manually using a graduated rod from the surface water. In addition, during the sample collection activities within the reservoir, depth to bedrock and/or to the refusal point of the core sampling device were recorded. Depth to bedrock on the downstream side of

each dam was measured as well as the top of each dam. This data was used to develop cross sections and creek bed geometry for each of the three reservoir areas. These are presented in Appendix D. This information will be used by WES to estimate the volume of sediment trapped behind each of the three dams. Pictures of each dam are provided in Appendix H.

## **2.2 Sediment/Polychlorinated Biphenyl Sample Collection**

### **2.2.1 Creek Bed**

Surface bed samples were taken at three locations in the creek reaches between the reservoirs. One bed sample was collected between transect 1C and transect 2C, one between transect 5C and transect 6C, and one between transect 10C and transect 11C. The samples were collected in the middle of the creek channel using a pipe core sample. A 1 5-inch polyvinyl chloride (PVC) pipe was driven into the sediment to the required depth. The pipe was then capped and withdrawn. The samples were placed in 1 liter glass jars and sent to WES for grain size analysis. See Plate 1 in Appendix A for sample locations. The water level in the reach upstream from the Woodside II dam was very low during the sampling event. A photograph in Appendix H depicts the large volume of sediment present in the creek bed.

### **2.2.2 "Oxbow" Wetlands Area**

U. S. Fish and Wildlife Service requested that six surface sediment samples be collected in an "oxbow" wetlands area on Twelve Mile Creek approximately halfway between Lay and Maw Bridges (see aerial photograph in Appendix E). These samples were collected from each bank by driving a 1.5-inch PVC pipe to a depth of 6 inches. The samples were placed in glass sample jars and sent to a certified laboratory for PCB analysis. Sample locations were surveyed and are indicated on Plate 1 in Appendix A.

### **2.2.3 Reservoirs**

In the reservoirs behind each dam, sediment core samples were taken at seven locations. For each reservoir area, three sediment core samples were taken along the center line of the pool. The samples were collected by driving a 1 5-inch pipe into the sediment to bedrock or refusal, whichever occurred first. The core samples were examined and logged to identify any distinct layers of sand, silt, clay, and/or organic matter. From the cores taken, samples were placed in glass sample jars and were sent to WES for grain size analysis.

Four additional sediment core samples were taken on the four established transects (T1, T2, T3, and T4). Samples on each transect were taken at points located one-third the width of the reservoir from the bank. Going upstream to the next transect, the sample point alternated to the opposite bank. These samples were also collected by driving a 1.5-inch pipe into the sediment to bedrock and/or refusal, whichever occurred first (see Appendix H, Photographs). The cores were examined and logged to identify changes in the soil characteristics of the sediment. If distinct layers were found in the core samples, multiple samples were prepared for analysis. Samples were placed in glass jars and were shipped to a South Carolina certified laboratory for PCB analysis.

# **Section 3**

# **Results**

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## **3.1 Sediment Analysis**

Grain size analysis was completed by WES for the three creek bed samples collected in the reaches between the three dams and for the nine core samples collected within the three reservoir pools. These data are presented in Appendix F.

## **3.2 Polychlorinated Biphenyl Analysis**

Nineteen samples were prepared from the 12 core samples taken in the three reservoir pools and were shipped to a South Carolina certified laboratory for PCB analysis. In addition, six samples were collected and shipped to a South Carolina certified laboratory for PCB analysis. The results are summarized in Table 1 and Table 2. The laboratory analysis data sheets are included in Appendix G.

## **3.3 Surveying Data**

The surveying data was used to produce the creek bed profiles and reservoir cross sections. The electronic files are enclosed (see disc in Appendix I) for use in the HEC-6T model.

**Table 1**  
**Summary of Reservoir PCB Sampling Results**

RESERVOIR	TRANSECT	DEPTH (inches)	PCB CONC. (mg/kg)	AROCLOR
Easley Central	T1	0 to 24	<0 058	1254
		42 to 62	<0 057	None identified
	T2	54 to 84	<0 059	None identified
		100 to 117	0 120	1242
	T3	56 to 71	0 068	1242
	T4	21 to -36	0 058	1242
		36 to 55	0 056	None identified
Woodside I	T1	40 to 50	(4.8)	1242
			(2.3)	1254
	T2	54 to 71	(5.0)	1242
			(2.0)	1254
			(1.1)	1260
	T3	0 to 40	0.27	1242
			0.15	1254
			0.06	1260
		0 to 64	0.14	1242
			0.17	1254
Woodside II	T1	0 to 115	0.59	1242
			0.61	1254
			0.09	1260
	T1	115 to 40	0.059	1242
			0.075	1254
	T1	40 to 64	0.3	1242
			0.44	1254
	T2	0 to 18	0.65	1242
			0.61	1254
	T2	55 to 70	(1.10)	1242
			0.70	1254
	T3	0 to 18	0.048	1254
		51 to 68	0.38	1242
			0.30	1254
	T4	12 to 29	0.35	1242
			0.42	1254

Avg =

**Table 2**  
**"Oxbow" Sediment Sampling Data**

SAMPLING POINT	PCB AROCLOR 1248 CONCENTRATION (ppm)	PCB AROCLOR 1254 CONCENTRATION (ppm)
1	0.69	0.69
2	0.51	0.62
3	0.82	0.77
4	0.40	0.47
5	0.58	0.62
6	0.59	0.77

# **Appendix A**

## **Transect Location and Sampling Locations**

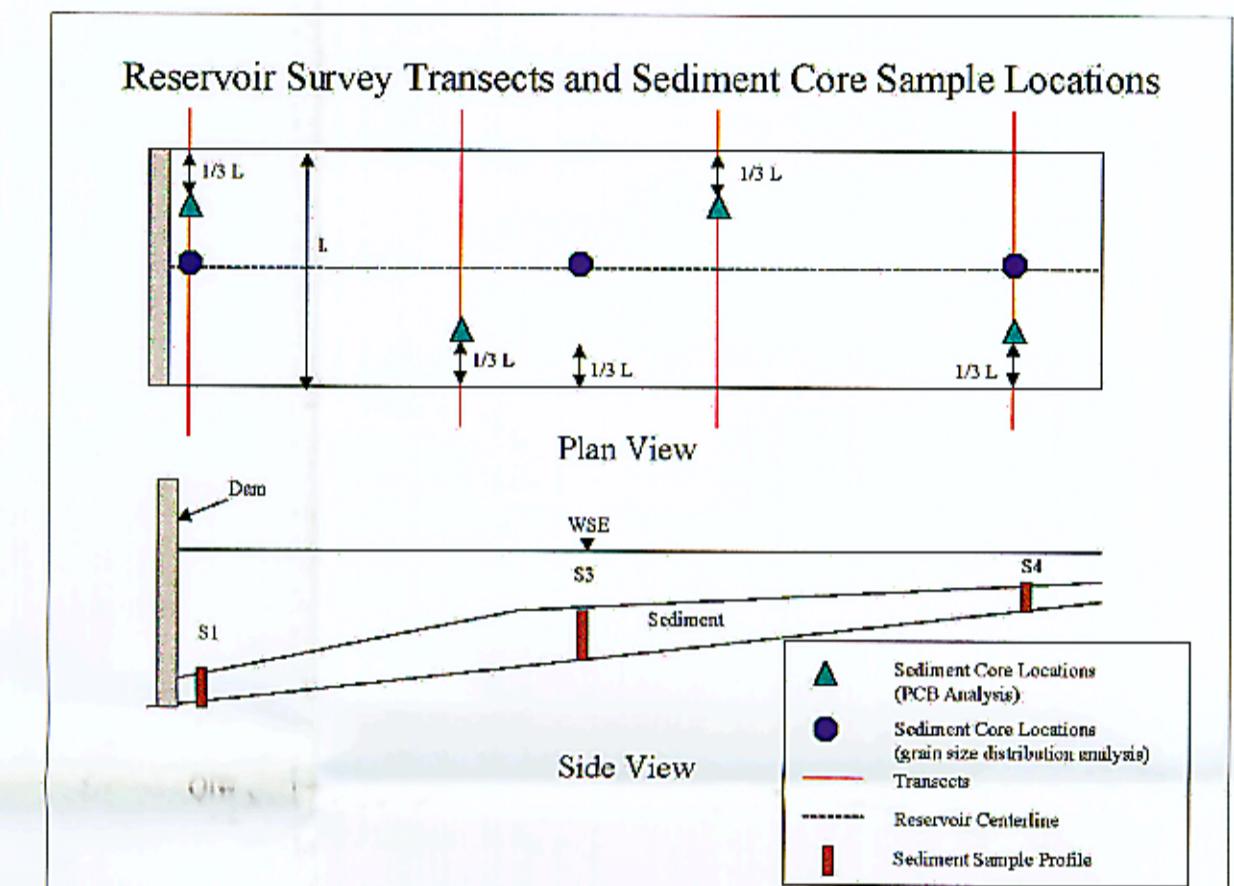
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LEGEND

- BED SAMPLE
- DAM LOCATION
- ✗ SURFACE SEDIMENT SAMPLES

WOODSIDE I, WOODSIDE II, & EASLEY CENTRAL RESERVOIR SAMPLING PLAN



0 2000 4000 6000 8000  
SCALE: 1''=2000'

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CHECKED BY:		1''=2000'	FILE NO. DPG007092308-101.DGN
APPROVED BY:		DATED PRINTED:	
DATE:	AUGUST 2002		PLATE 1

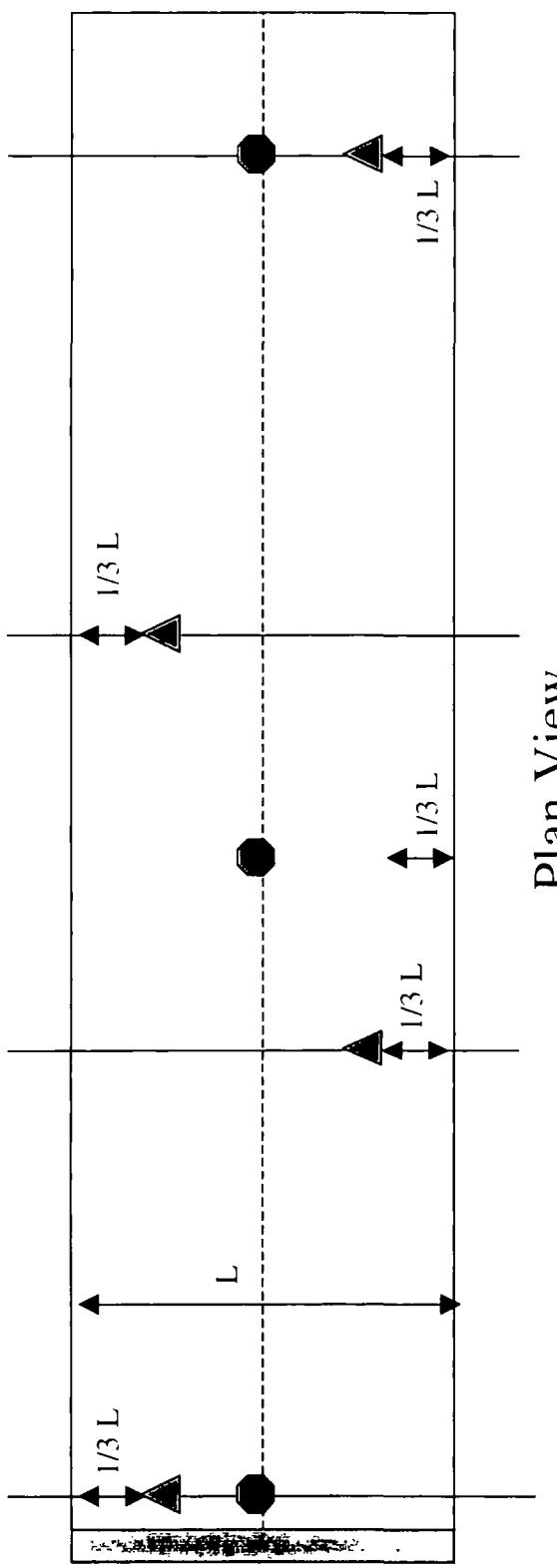
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# **Appendix B**

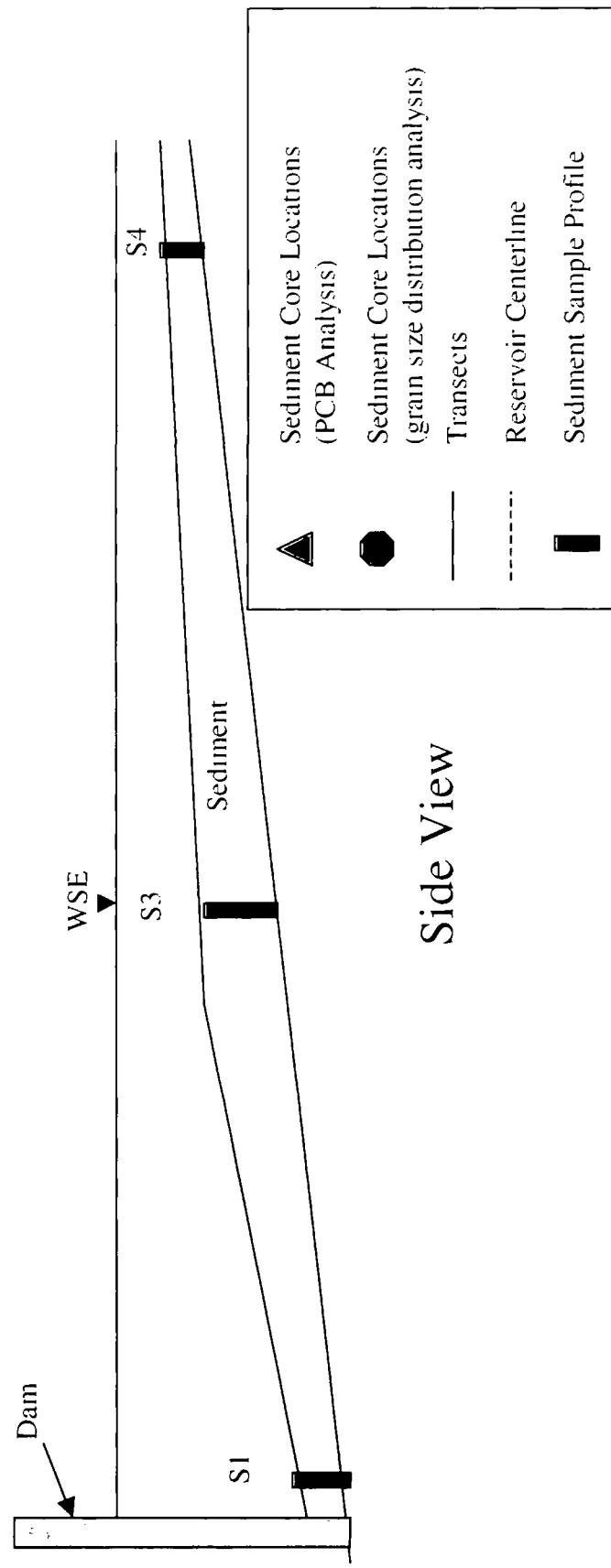
## **Reservoir Summary Transect and Sampling Core Location Drawing**

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# Reservoir Survey Transects and Sediment Core Sample Locations



Plan View

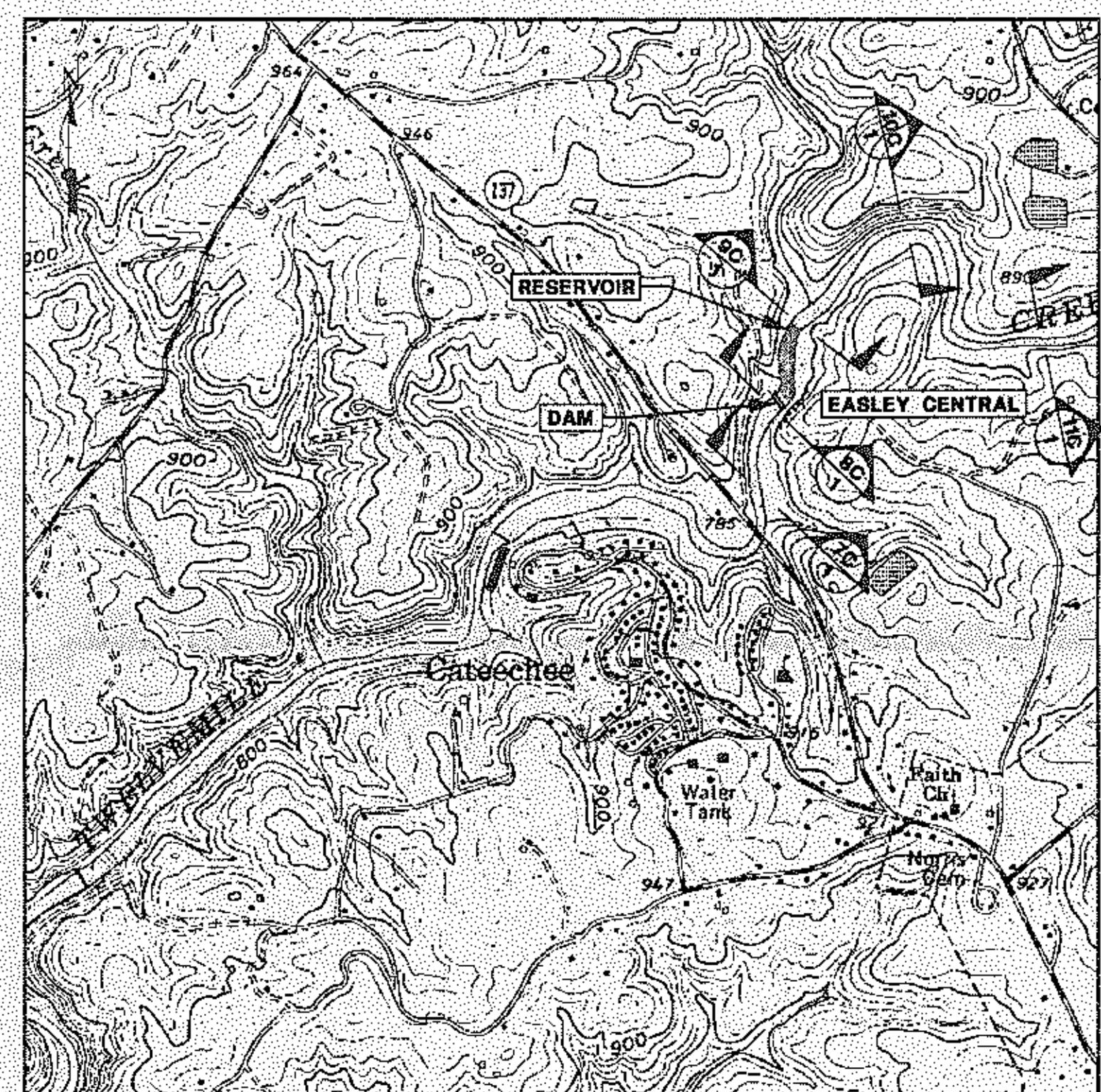


Side View

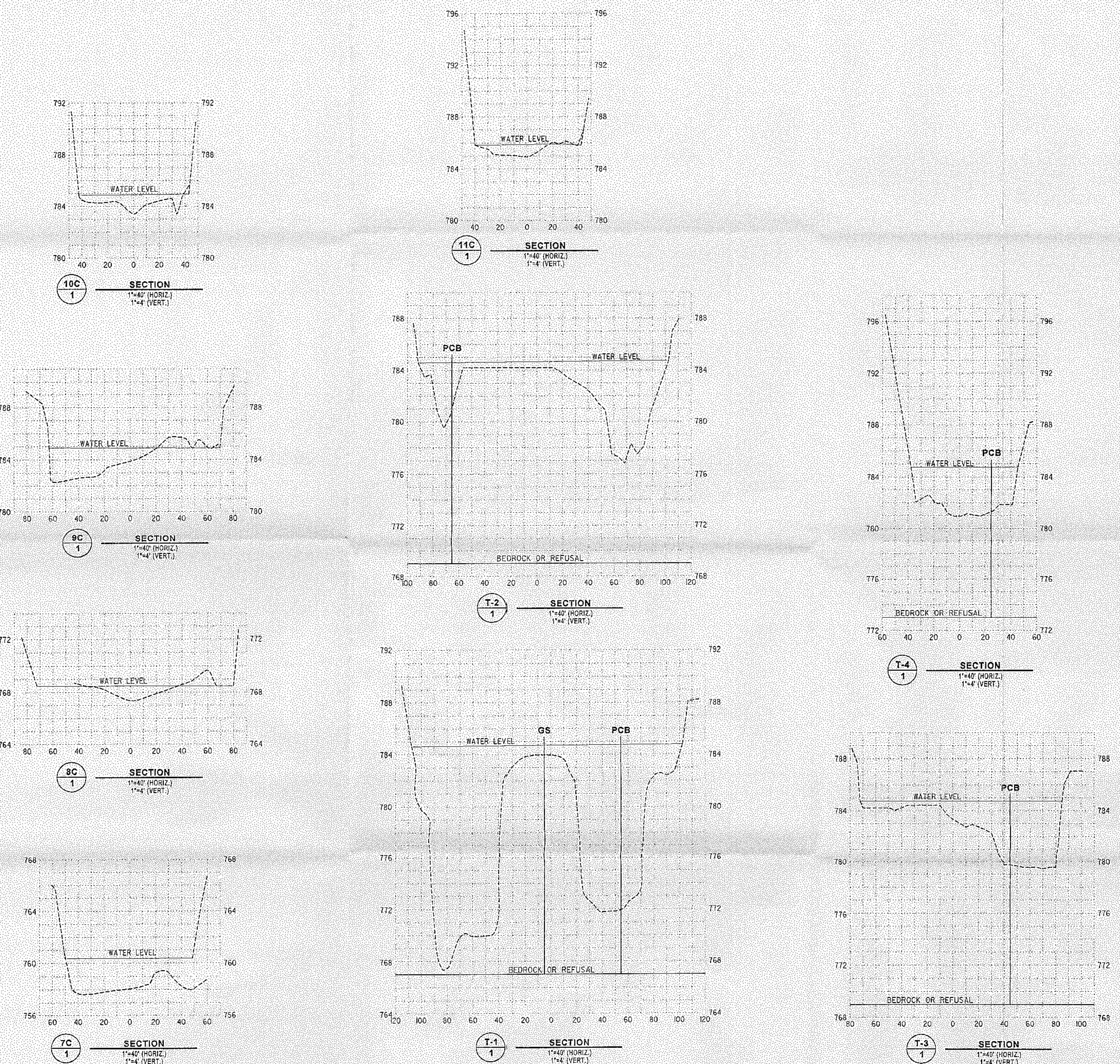
# **Appendix C**

## **Creek Bed Profiles and Reservoir Cross Sections**

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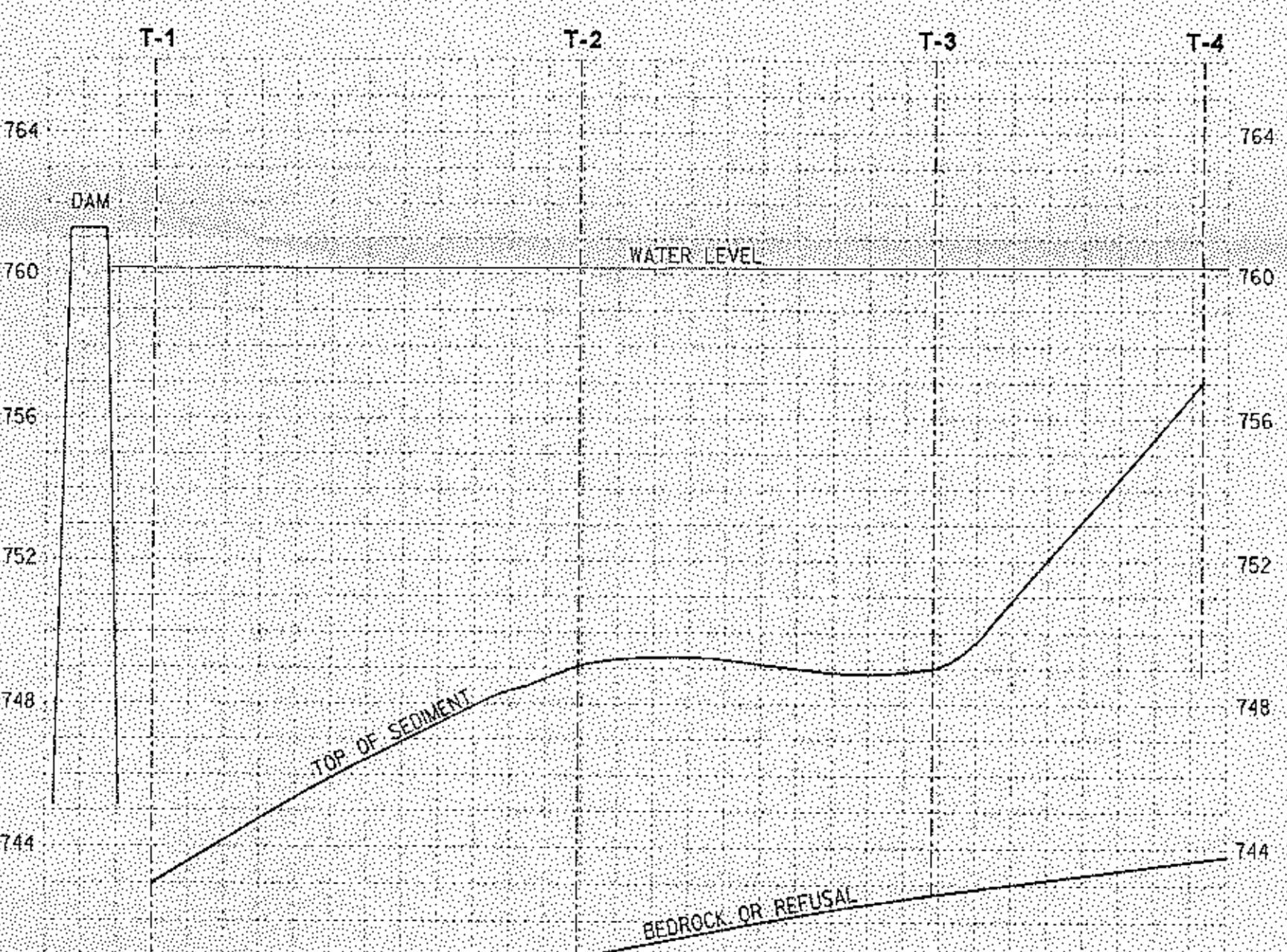
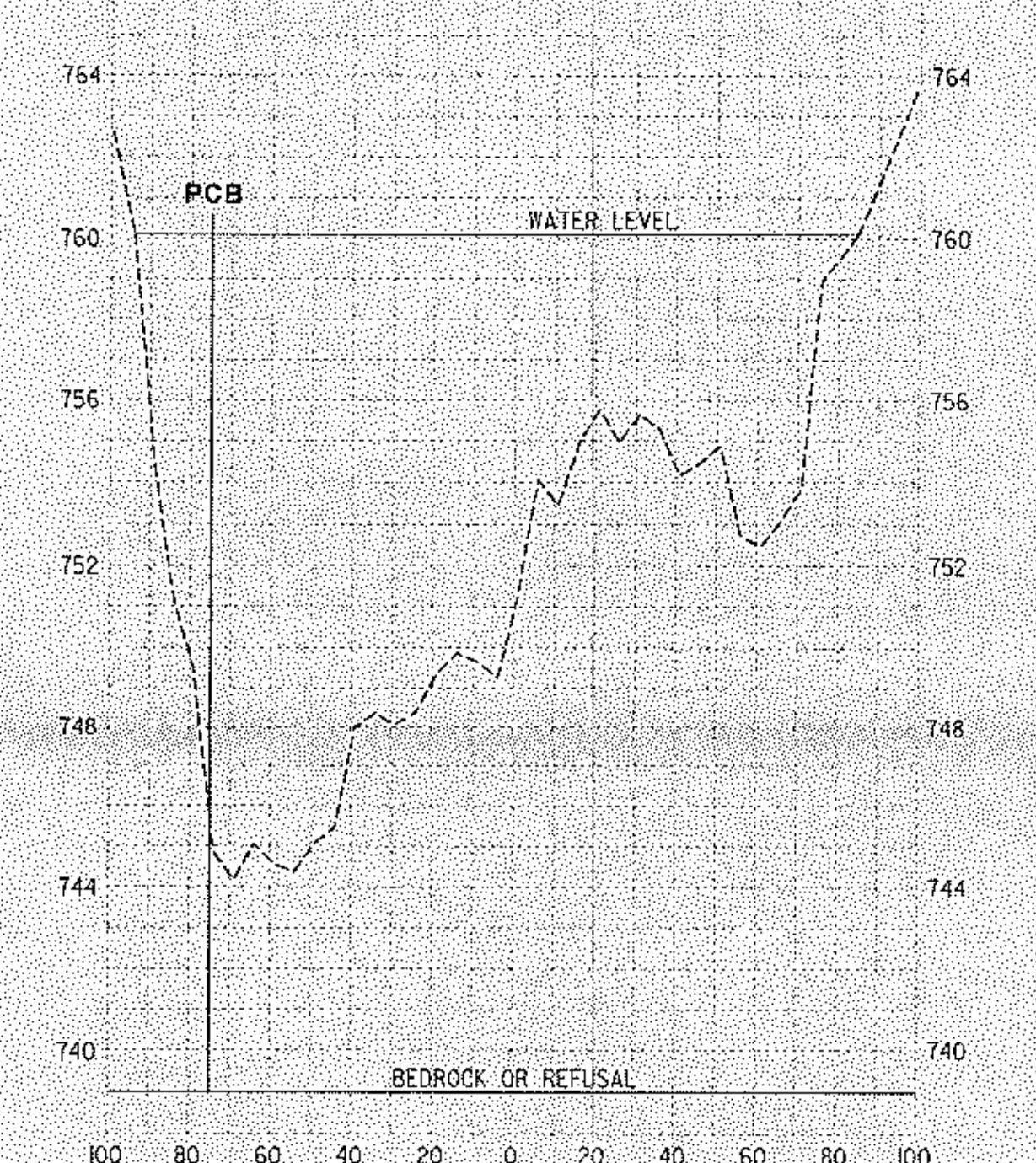
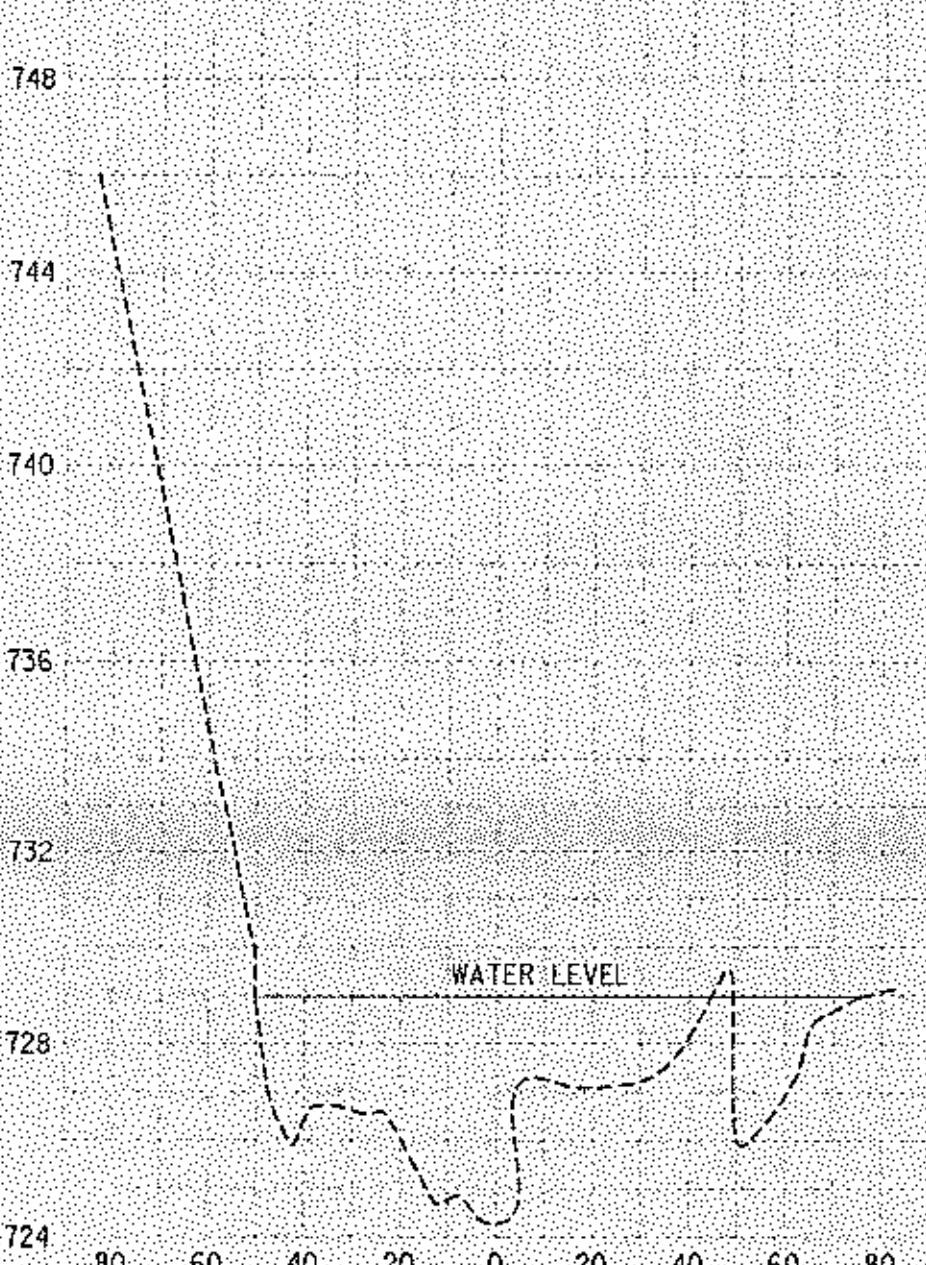
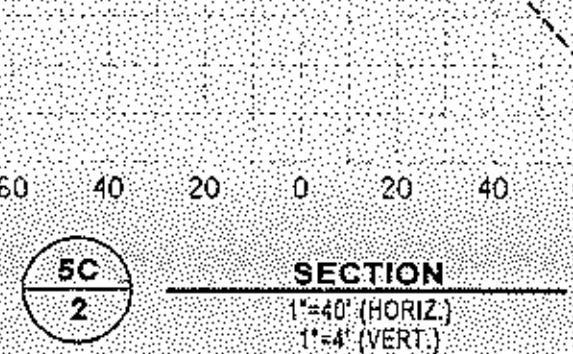
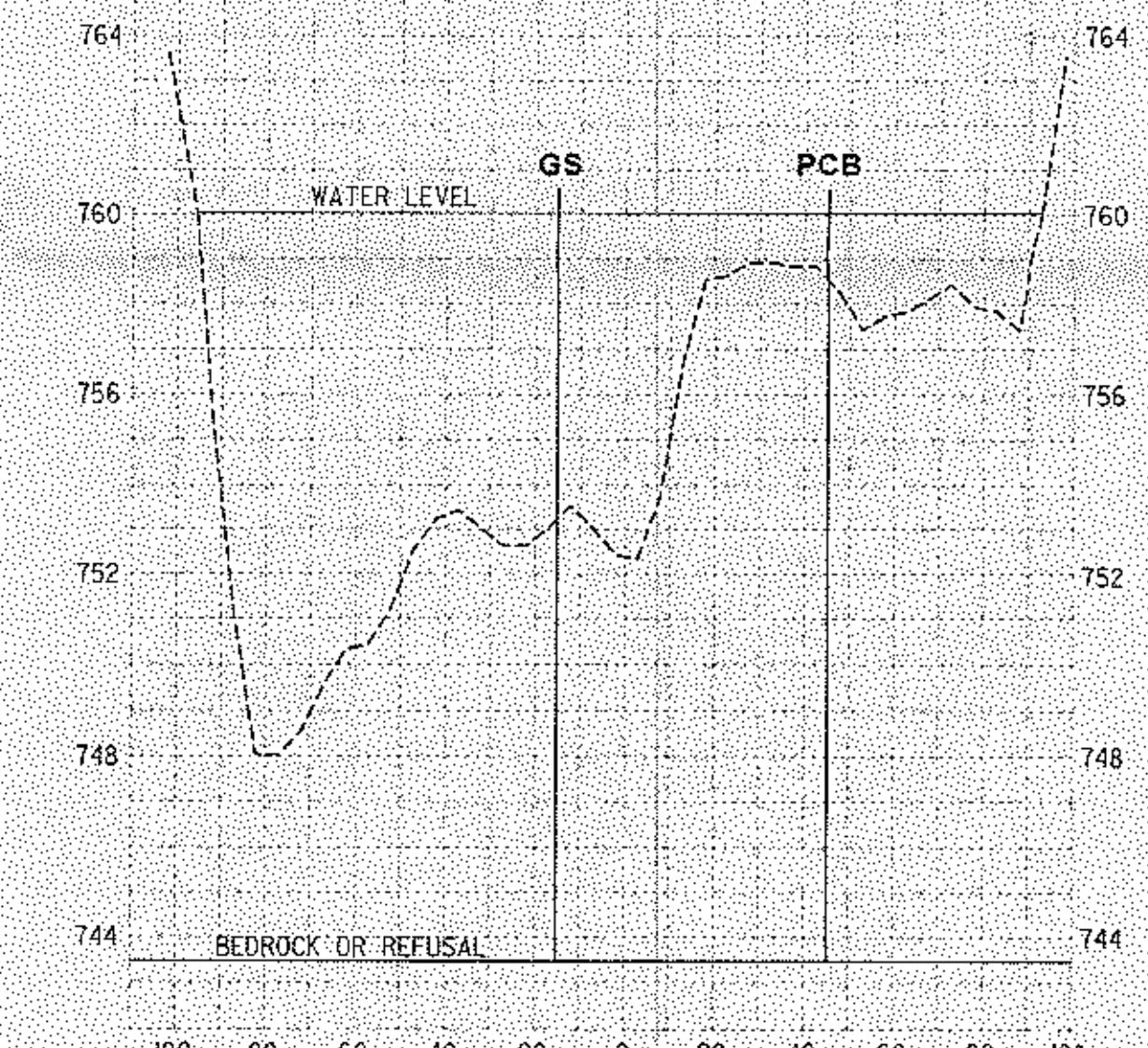
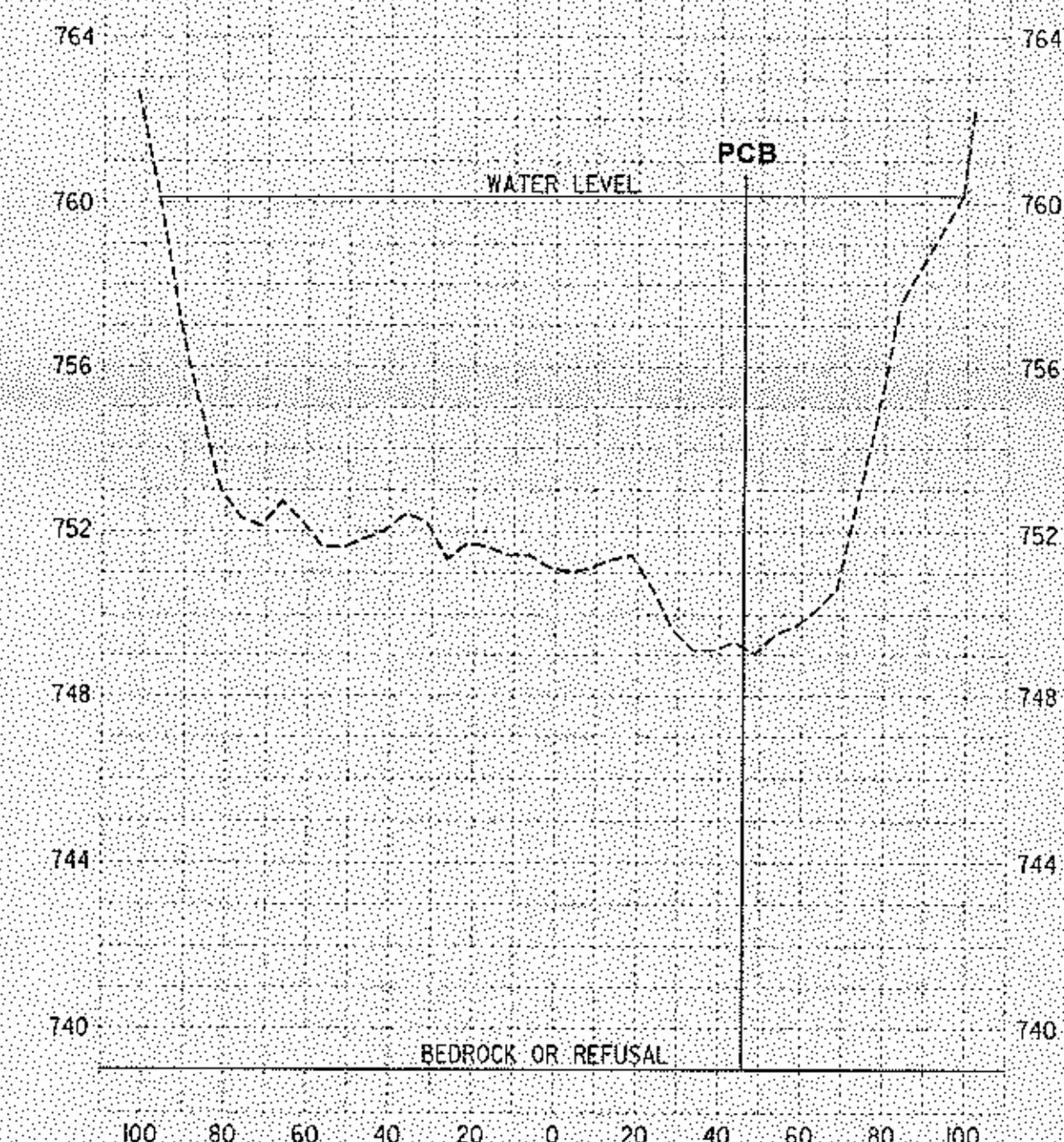
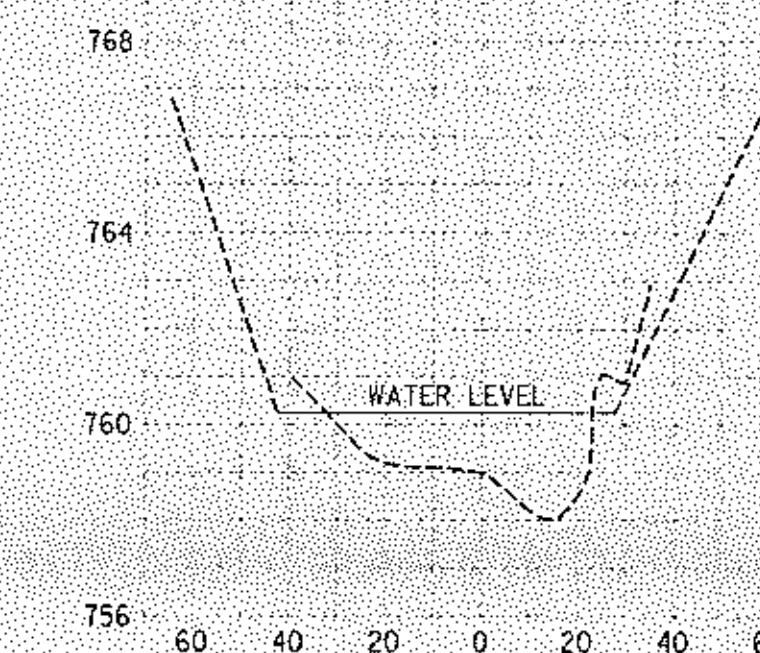
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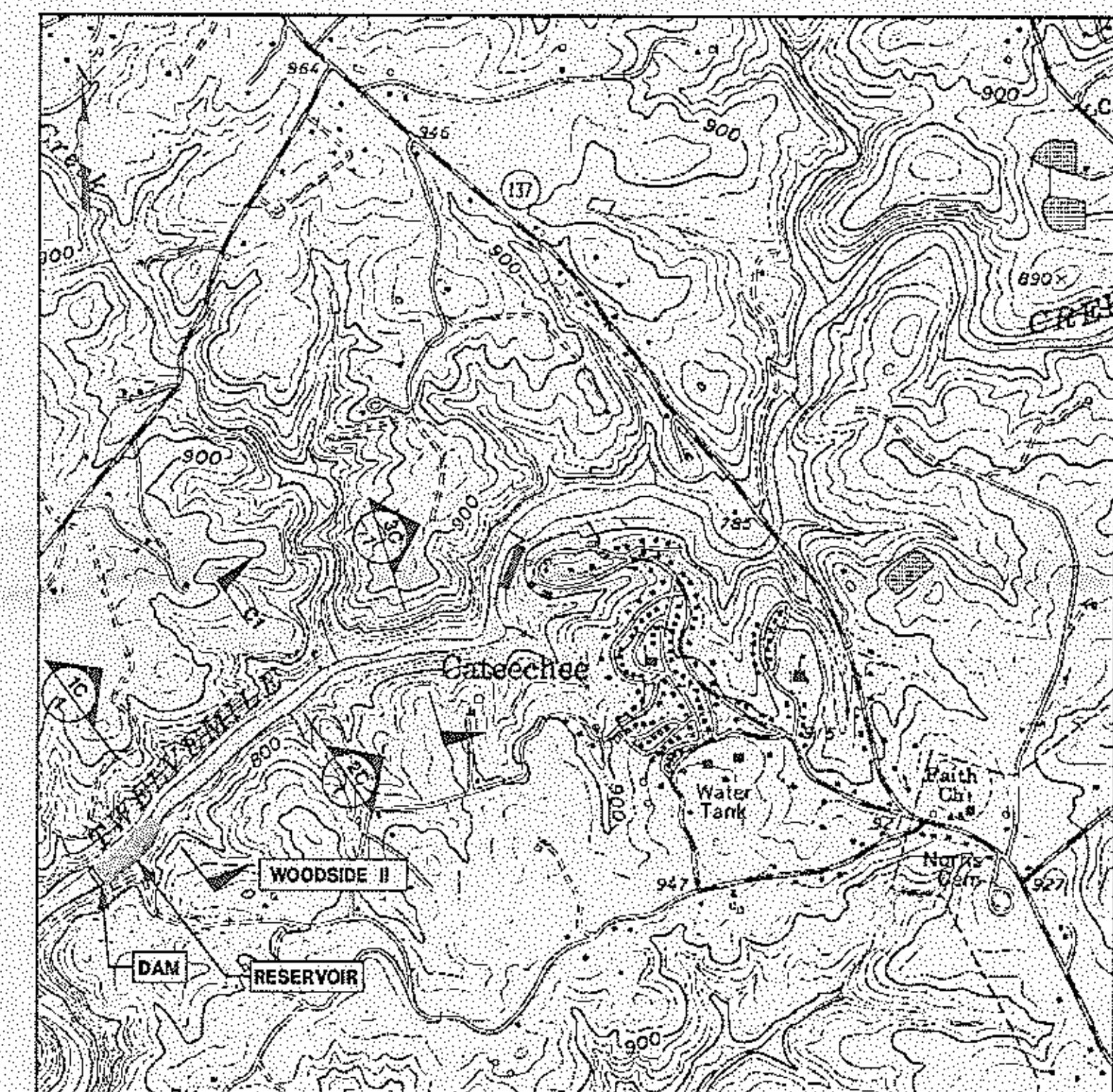


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BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

BEDROCK OR REFUSAL

SECTION T 1 T-2 T-3 T-4

1'=40' (HORIZ.)  
1'=4' (VERT.)

## Appendix D

# Aerial Photograph "Oxbow" Area



**RMT** INC

**OXBOW SAMPLE LOCATIONS**

**12 MILE CREEK**

DRAWN BY	ARR
APPROVED BY	
PROJECT NO	70923 09
FILE NO	SLG-00-70923 09-001 DGN
DATE	NOVEMBER 2002

**APPENDIX D**

# **Appendix E**

## **Sediment and Core Sample**

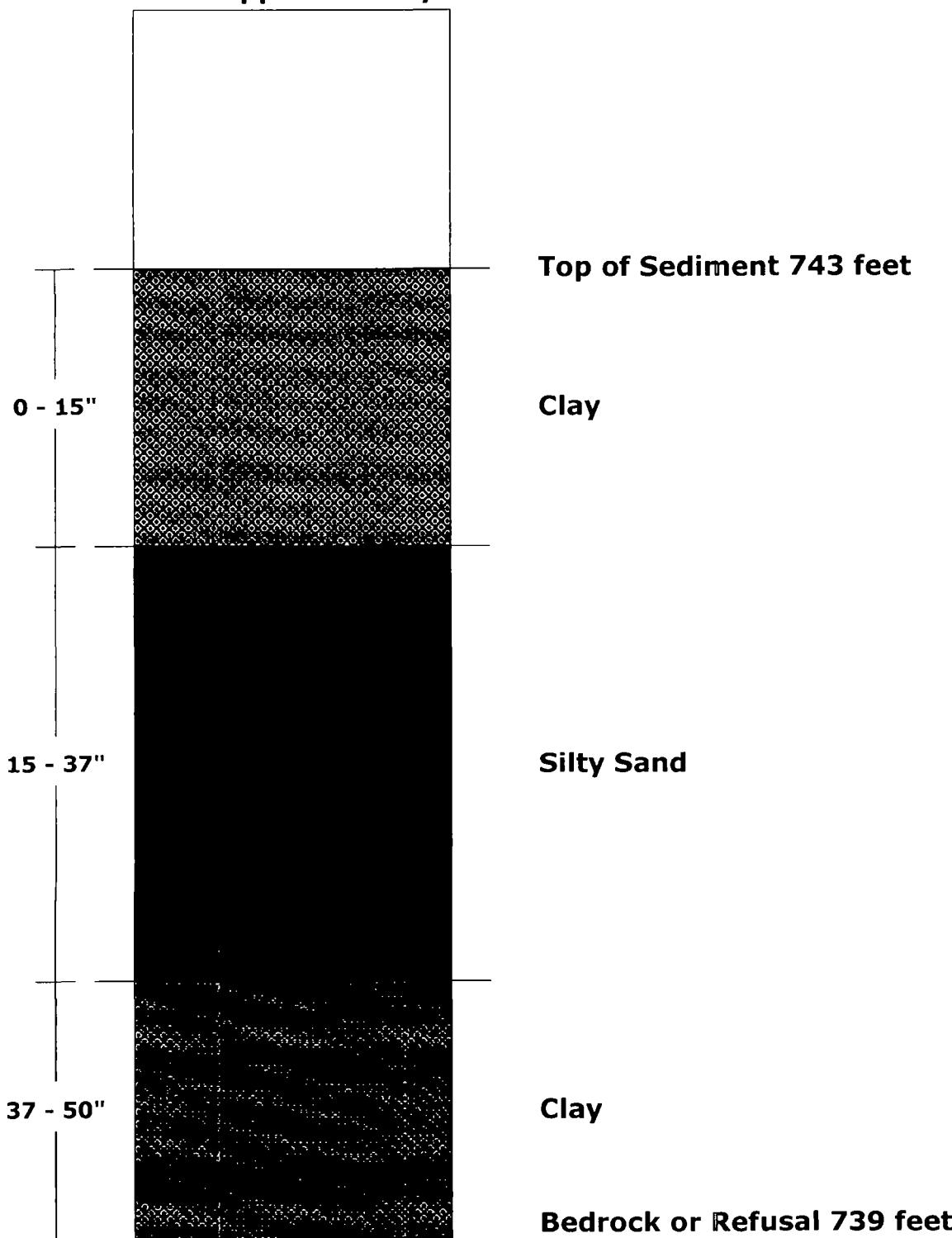
### **Grain Size Analysis**

---

# Woodside - I (T-1)

(PCB)

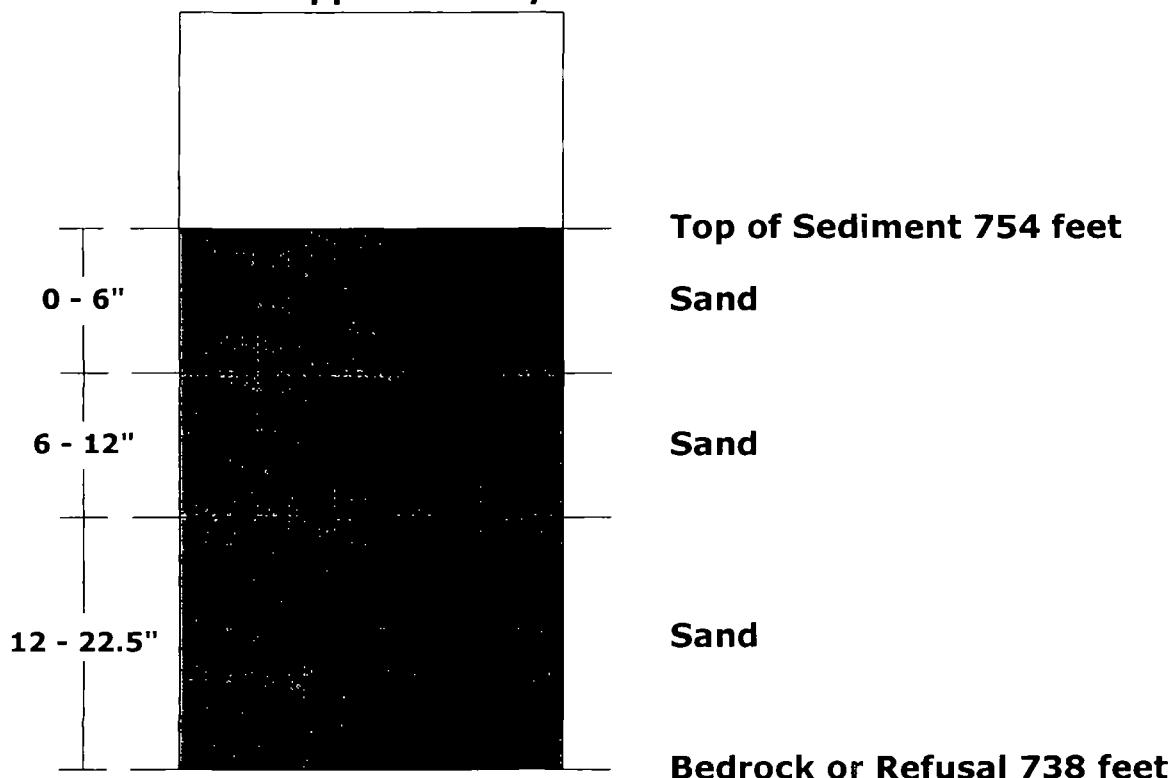
W.S. Approximately 760 feet



# Woodside I (T-1)

(Grain Size)

W.S. Approximately 760 feet



## SIEVE ANALYSIS

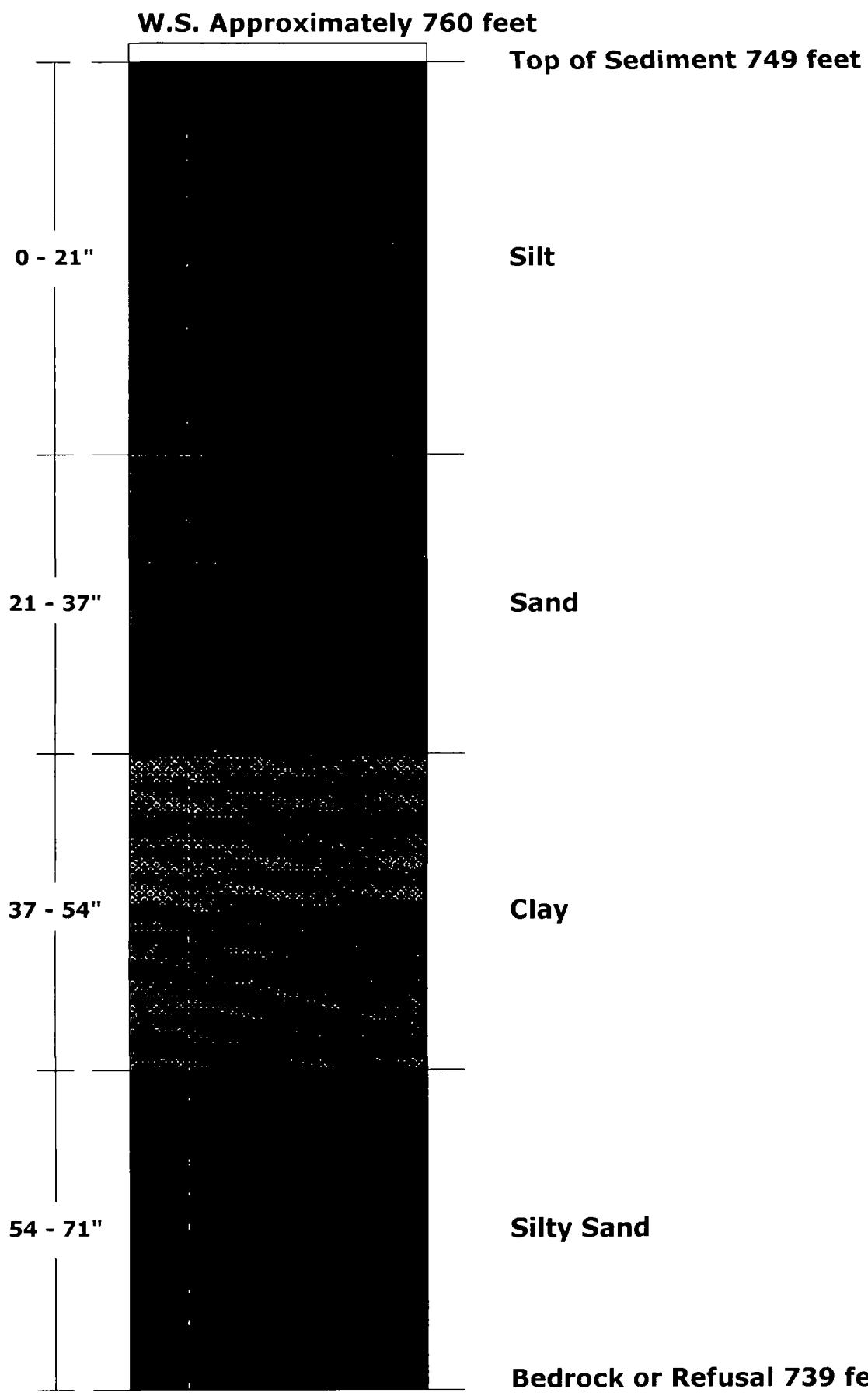
PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID Woodside 1-T1 0-22 5" 8/27/02  
 FILE IS ws1t1

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED IN GRAMS	PERCENT RETAINED PARTIAL	TOTAL	FINER BY WEIGHT
76 200	3 in				
50 800	2 in				
38 100	1-1/2 in				
25.400	1 in				
19 050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6.727	No.3				
4.760	No.4				
4 000	No.5	.0000	.000	.000	100.000
3 360	No.6	.1448	1.316	1.316	98 684
2 380	No 8				
2 000	No 10	.0898	816	2.132	97 868
1 414	No.14				
1.190	No 16				
1 000	No 18				
.840	No.20	.8466	7.692	9 824	90.176
.590	No.30				
500	No 35				
420	No.40	2 0644	18.757	28 580	71.420
297	No 50				
250	No 60				
210	No 70	2.7977	25.419	54 000	46.000
149	No.100	2.2226	20.194	74 194	25.806
.125	No 120				
105	No 140				
074	No.200	1.2480	11.339	85 533	14 467
063	No 230	.1463	1.329	86 862	13.138
	PAN	1 4460	13.138	100 000	000
TOTAL WEIGHT IN GRAMS		11 0062			

D95 =	1 4472 mm	D90 =	8345 mm	D85 =	6937 mm
D80 =	5767 mm	D75 =	.4794 mm	D70 =	.4041 mm
D65 =	3526 mm	D60 =	3076 mm	D55 =	.2684 mm
D50 =	2342 mm	D45 =	2065 mm	D40 =	1896 mm
D35 =	.1742 mm	D30 =	.1600 mm	D25 =	1418 mm
D20 =	.1041 mm	D15 =	0765 mm		

# Woodside - I (T-2)

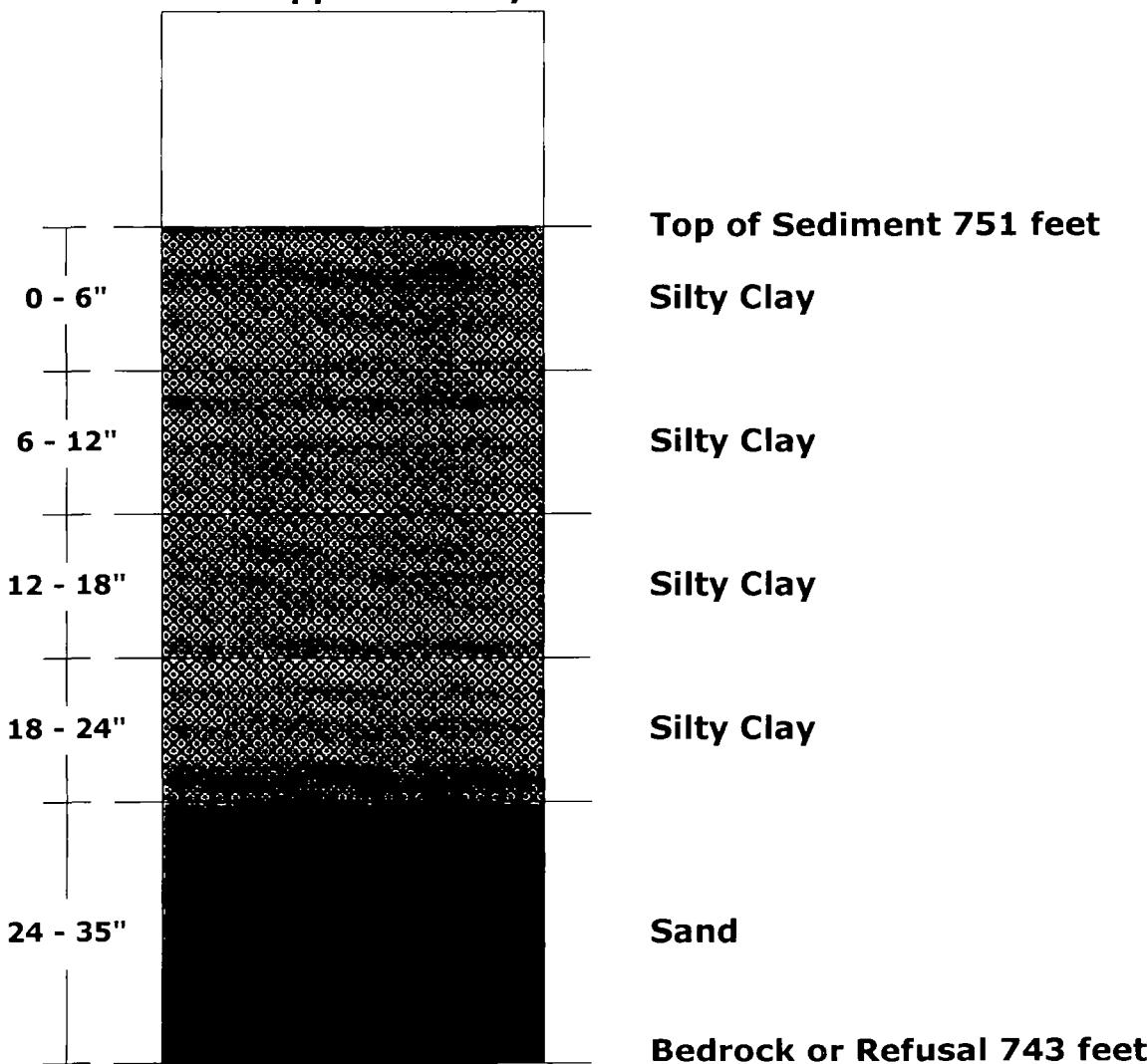
(PCB)



# Woodside I (T-2 and T-3)

(Grain Size)

W.S. Approximately 760 feet



SIEVE ANALYSIS

PROJECT 12 Mile Creek August & September 2002

SAMPLE ID Woodside 1-T2 & T3 0-35" 8/27/02

FILE IS ws1t2t3

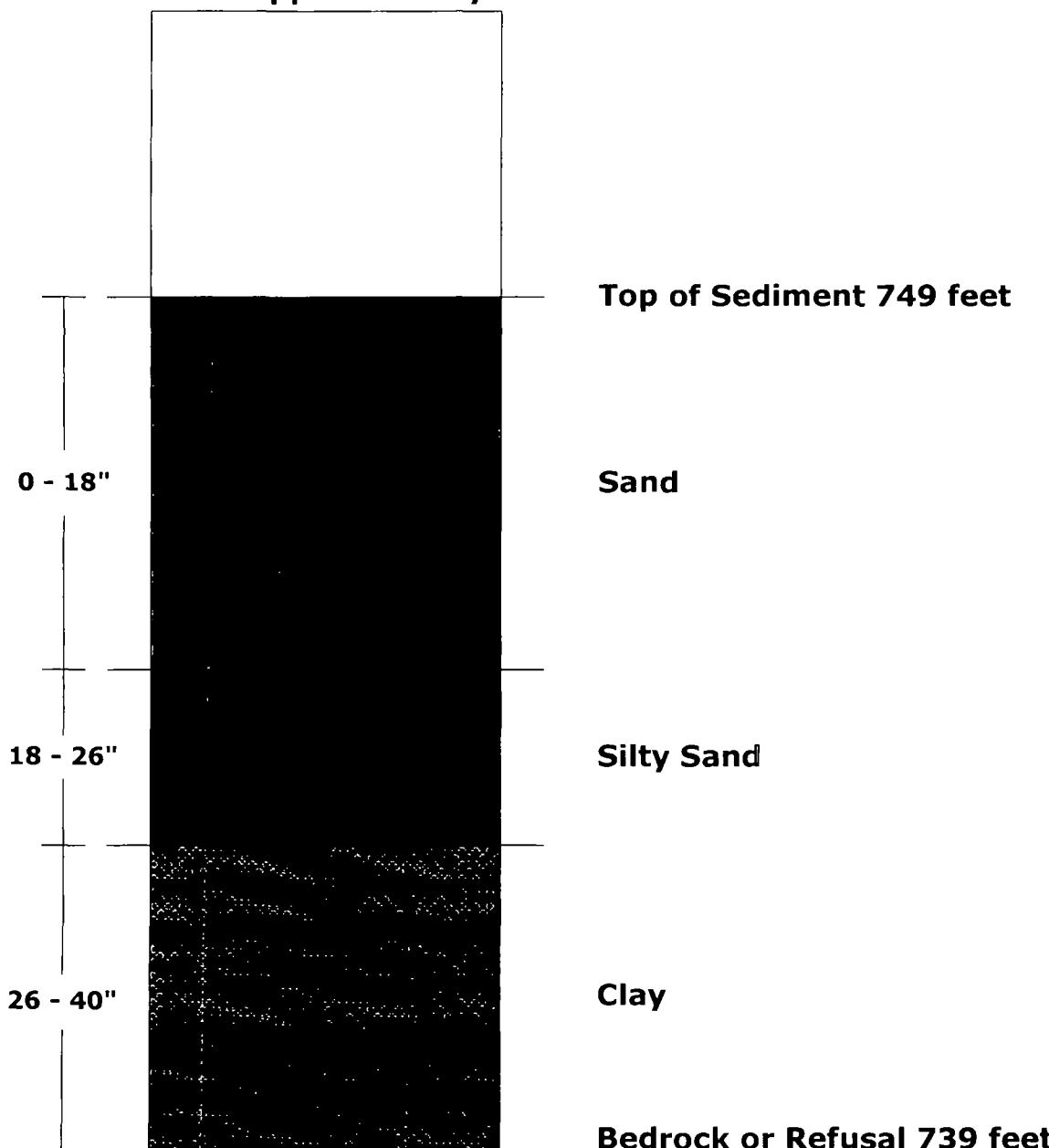
MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76.200	3 in				
50.800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6.727	No.3				
4 760	No.4				
4.000	No 5				
3.360	No.6				
2.380	No.8	.0000	000	000	100 000
2 000	No.10	.0649	.761	.761	99 239
1.414	No 14				
1.190	No 16				
1.000	No 18				
.840	No.20	2219	2.603	3.364	96.636
.590	No .30				
.500	No 35				
.420	No 40	.3168	3 716	7.081	92 919
.297	No .50				
.250	No .60				
.210	No .70	9540	11.191	18.272	81.728
.149	No.100	1 9673	23.078	41.349	58 651
.125	No.120				
.105	No 140				
.074	No 200	1.8740	21.983	63 332	36 668
.063	No 230	.1533	1 798	65 131	34.869
	PAN	2.9725	34 869	100 000	000
TOTAL WEIGHT IN GRAMS		8.5247			

D95 = .6191 mm	D90 = 3505 mm	D85 = 2572 mm
D80 = 2047 mm	D75 = 1900 mm	D70 = 1764 mm
D65 = .1638 mm	D60 = .1520 mm	D55 = 1327 mm
D50 = .1131 mm	D45 = .0965 mm	D40 = 0823 mm
D35 = .0637 mm		

# Woodside - I (T-3)

(PCB)

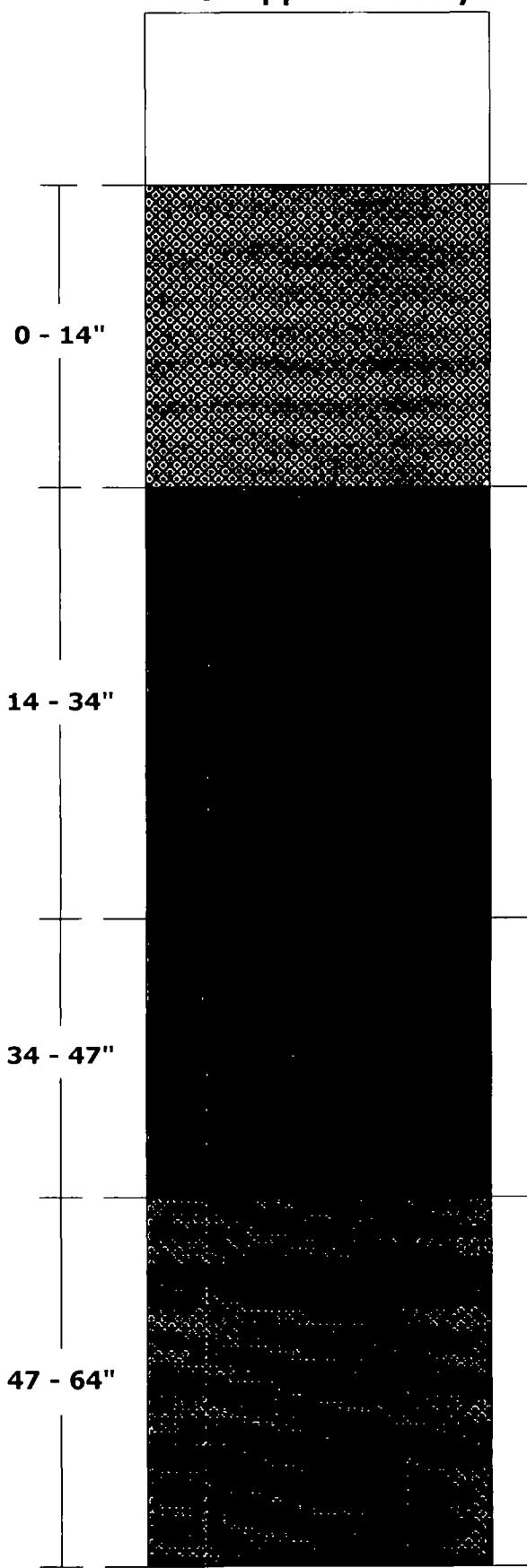
W.S. Approximately 760 feet



# Woodside - I (T-4)

(PCB)

W.S. Approximately 760 feet



Top of Sediment 754 feet

Silty Clay

Silty Sand

Sand

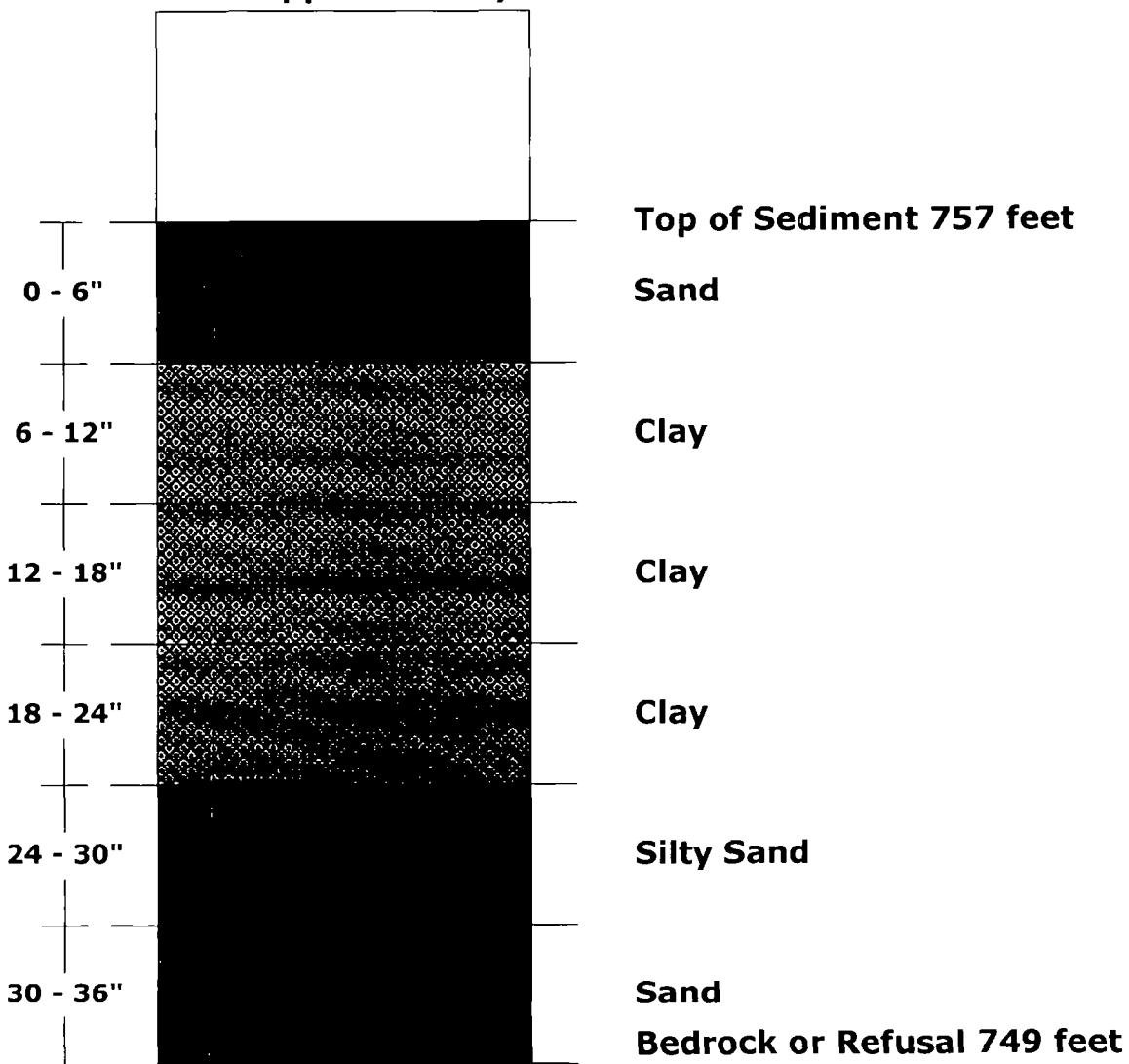
Clay

Bedrock or Refusal 743.5 feet

# Woodside I (T-4)

(Grain Size)

W.S. Approximately 760 feet



## SIEVE ANALYSIS

PROJECT. 12 Mile Creek August &amp; September 2002

SAMPLE ID Woodside 1-T4 0-36" 8/27/02

FILE IS ws1t4

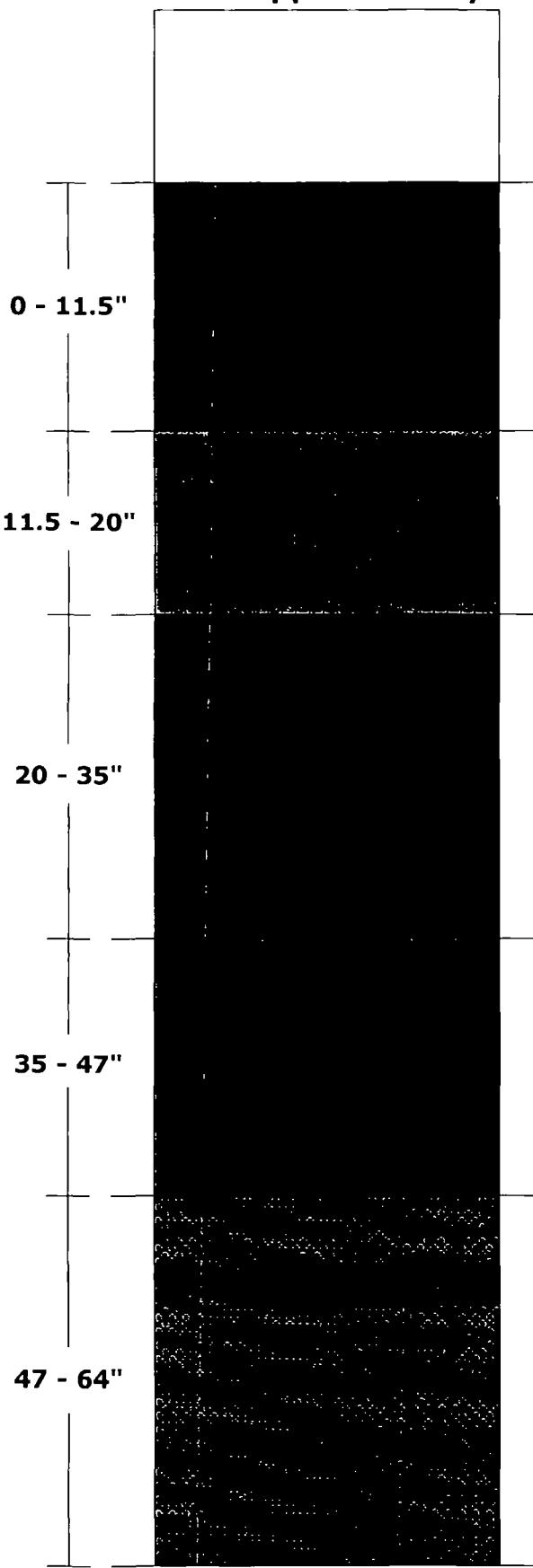
MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	PERCENT RETAINED	TOTAL	FINER BY WEIGHT
76 200	3 in				
50 800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12 700	1/2 in				
9 525	3/8 in				
6 727	No 3				
4 760	No 4				
4 000	No 5	0000	.000	.000	100.000
3 360	No .6	.1673	1.786	1.786	98.214
2 380	No .8				
2.000	No.10	.3650	3.897	5 683	94 317
1.414	No.14				
1.190	No.16				
1 000	No 18				
840	No 20	1 7581	18.770	24.453	75 547
590	No 30				
500	No.35				
.420	No.40	2.2163	23.661	48.114	51.886
297	No.50				
.250	No.60				
.210	No.70	.9711	10.368	58.482	41.518
149	No.100	.3529	3 768	62.249	37 751
125	No.120				
.105	No.140				
074	No.200	.6575	7 020	69 269	30 731
063	No.230	.1430	1 527	70.795	29.205
	PAN	2 7355	29.205	100 000	000
TOTAL WEIGHT IN GRAMS		9.3667			

D95 = 2.1904 mm      D90 = 1.6382 mm      D85 = 1.3002 mm  
 D80 = 1.0319 mm      D75 = 8266 mm      D70 = .7140 mm  
 D65 = .6167 mm      D60 = .5327 mm      D55 = .4601 mm  
 D50 = 3702 mm      D45 = 2650 mm      D40 = .1829 mm  
 D35 = .1133 mm      D30 = .0685 mm

# **Woodside - II (T-1)**

(PCB)

**W.S. Approximately 717 feet**



**Top of Sediment 696 feet**

**Silt**

**Sand**

**Fine Sand**

**Sand**

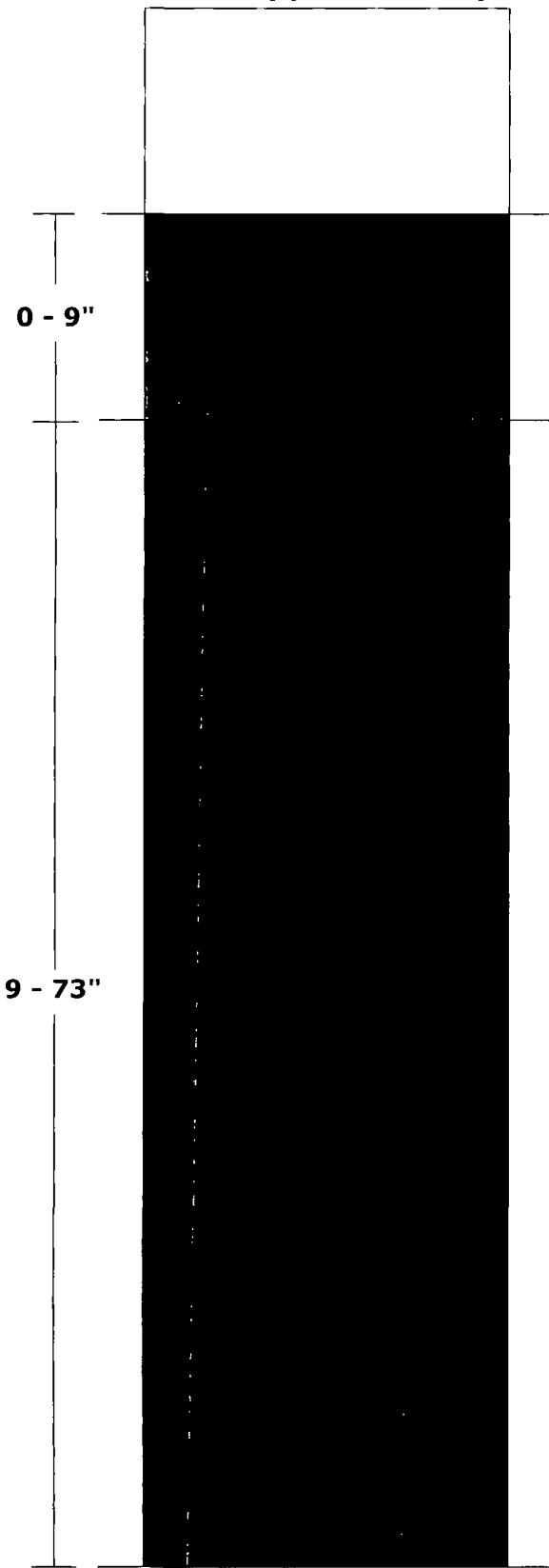
**Clay**

**Bedrock or Refusal 690 feet**

# Woodside II (T-1)

(Grain Size)

W.S. Approximately 717 feet



Soil type not identified during sample extraction.

Bedrock or Refusal 690 feet

COULTER LS 13.58 31 Oct 2002  
File name: C:\coulter\12MILECR\w2t1026 exp  
Group ID 12 Mile Creek  
Sample ID. Woodside 2-T1 0-26"  
Operator. DB  
Comments  
Comments oxi. 3 times some leaf fragments & unknown shiny flakes  
Bar Code

From 0 375  
To 948.3  
Volume 100 000  
Mean 236 8  
Median: 182.3  
D(3,2) 22.43  
Mode. 223 4  
S.D. 213 6  
C V. 90.22  
Skewness 1 300  
Kurtosis: 1.252

% < Size  
10 16.76  
25 76.91  
50 182.3  
75 324.8  
90 553.7

Volume	Particle
%	Diameter
	um <
5	5 236
10	16 76
15	32.95
20	53.96
25	76.91
30	100.4
35	122.1
40	142.2
45	161 9
50	182 3
55	204 0
60	227 9
65	254.8
70	286.5
75	324.8
80	372.4
85	440.6
90	553.7
95	727 9

COULTER LS 14:01 31 Oct 2002  
File name C \coulter\12MILECR\w2t12643 exp  
Group ID. 12 Mile Creek  
Sample ID: Woodside 2-T1 26-43"  
Operator: DB  
Comments  
Comments Oxi 3 times unknown shiny flakes in sample  
Bar Code

From 0 375  
To 948.3  
Volume 100 0  
Mean 302 7  
Median 286.2  
D(3,2) 41 85  
Mode 324.4  
S.D. 181 6  
C.V. 59.99  
Skewness 0 794  
Kurtosis 1 053

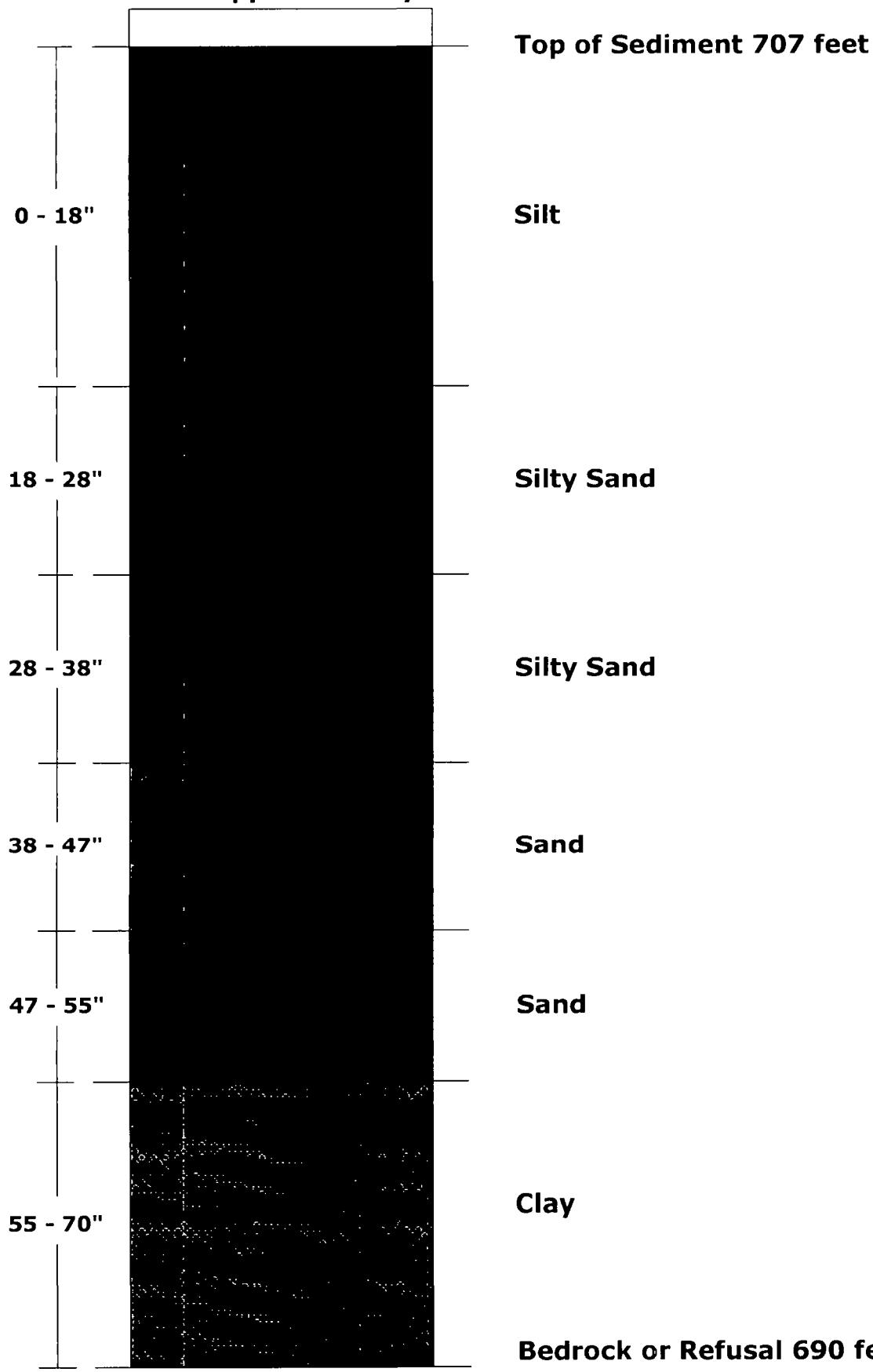
% < Size  
10 66 57  
25 189 7  
50 286 2  
75 395 3  
90 527 6

Volume	Particle
%	Diameter
	um <
5	18.94
10	66 57
15	122.5
20	162.4
25	189 7
30	212 1
35	231.8
40	250.2
45	268.2
50	286.2
55	304 6
60	324.2
65	345.0
70	368.1
75	395.3
80	427.5
85	468.6
90	527.6
95	646.4

# Woodside - II (T-2)

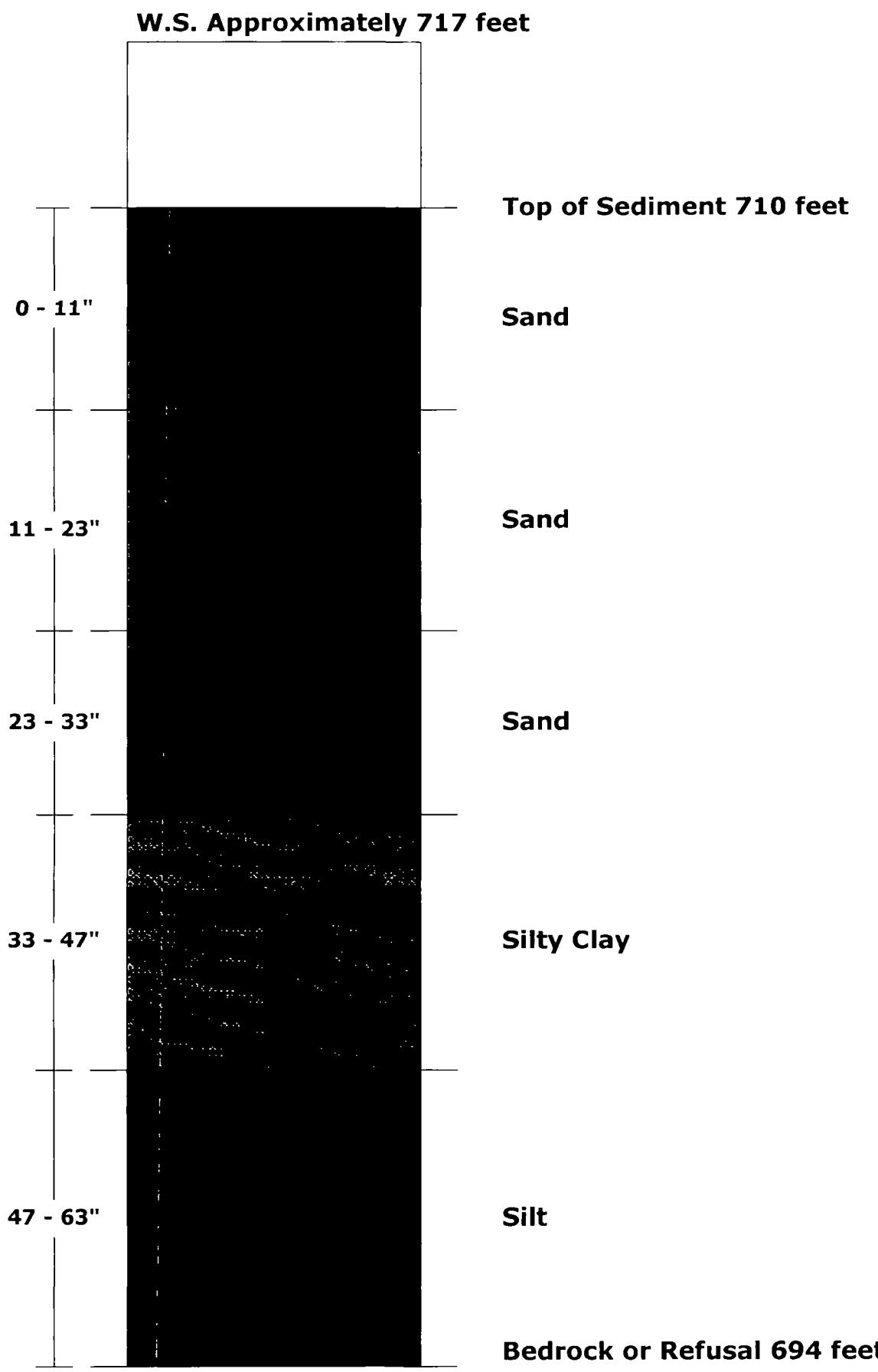
(PCB)

W.S. Approximately 717 feet



# Woodside II (Between T-2 and T-3)

(Grain Size)



## SIEVE ANALYSIS

PROJECT: 12 Mile Creek August &amp; September 2002

SAMPLE ID Woodside 2-T1 &amp; T2 0-33" 9/11/02

FILE IS ws2t1t2

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50 800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12 700	1/2 in				
9 525	3/8 in				
6 727	No 3				
4 760	No 4				
4 000	No 5	0000	000	.000	100.000
3 360	No.6	.2800	220	.220	99.780
2 380	No.8				
2 000	No 10	3 3600	2 645	2.866	97 134
1 414	No 14				
1 190	No 16				
1 000	No 18				
840	No 20	36 1600	28 468	31 334	68.666
590	No 30				
500	No.35				
420	No 40	64.5000	50 779	82 113	17 887
297	No 50				
.250	No.60				
.210	No 70	20 7700	16.352	98 465	1.535
.149	No 100	1 5600	1.228	99.693	.307
.125	No 120				
.105	No 140				
.074	No.200	.2800	220	99 913	087
.063	No.230	0400	.031	99 945	.055
	PAN	0700	055	100 000	000
TOTAL WEIGHT IN GRAMS		127	0200		

D95 = 1 8741 mm	D90 = 1 6092 mm	D85 = 1.3818 mm
D80 = 1 1865 mm	D75 = 1.0188 mm	D70 = .8748 mm
D65 = 7990 mm	D60 = .7463 mm	D55 = .6970 mm
D50 = 6511 mm	D45 = .6081 mm	D40 = .5680 mm
D35 = .5305 mm	D30 = 4955 mm	D25 = .4628 mm
D20 = .4323 mm	D15 = 3716 mm	D10 = .3006 mm
D 5 = .2432 mm		

COULTER LS 14:02 31 Oct 2002  
File name C \coulter\12MILECR\w23363 exp  
Group ID: 12 Mile Creek  
Sample ID: Woodsid 2-T1 & T2 33-63"  
Operator: DB  
Comments:  
Comments ox1. 3 times unknown shiny flakes & leaf fragments in sample  
Bar Code

From 0 375  
To 948 3  
Volume 100 0  
Mean 227 0  
Median 189.7  
D(3,2) . 19 84  
Mode 245.2  
S.D 198.2  
C V : 87 32  
Skewness: 1.331  
Kurtosis: 1 750

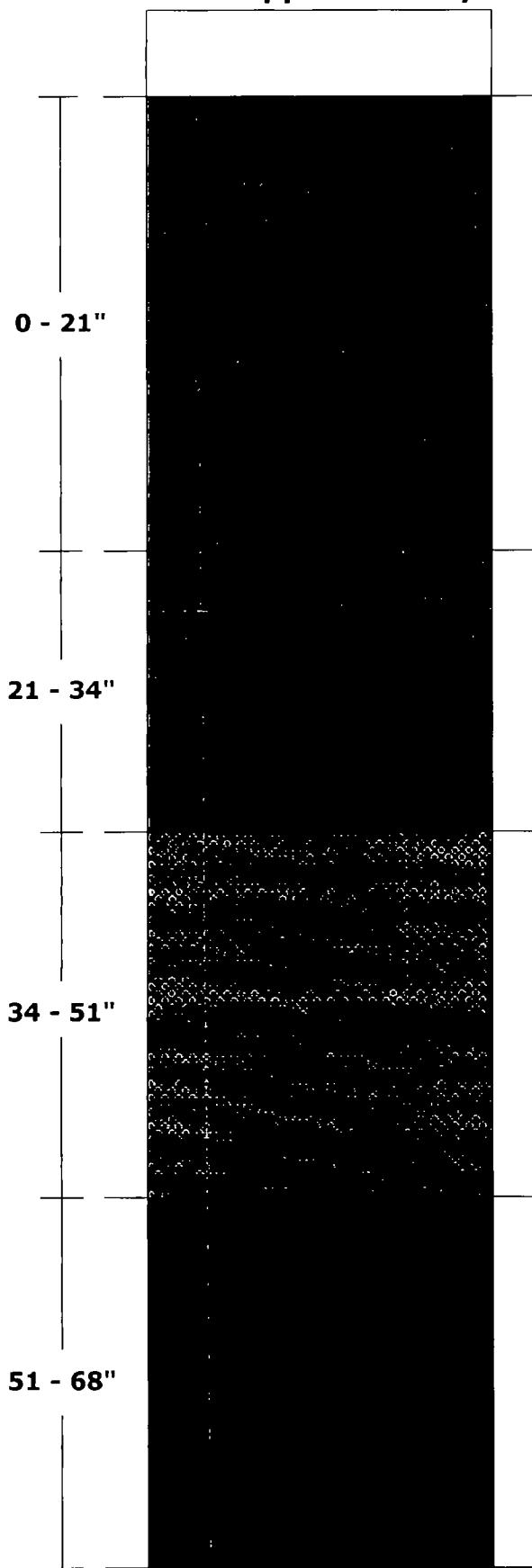
% < Size  
10 13 25  
25 75 40  
50 189 7  
75 309 1  
90 486.8

Volume Particle  
% Diameter  
um <  
5 4 112  
10 13.25  
15 28.09  
20 49 37  
25 75 40  
30 103 6  
35 128 5  
40 150.2  
45 170 2  
50 189.7  
55 209.6  
60 230.5  
65 253.3  
70 279 0  
75 309.1  
80 347 4  
85 399 7  
90 486 8  
95 670 6

# Woodside - II (T-3)

(PCB)

W.S. Approximately 717 feet



Top of Sediment 703 feet

Sand

Sand

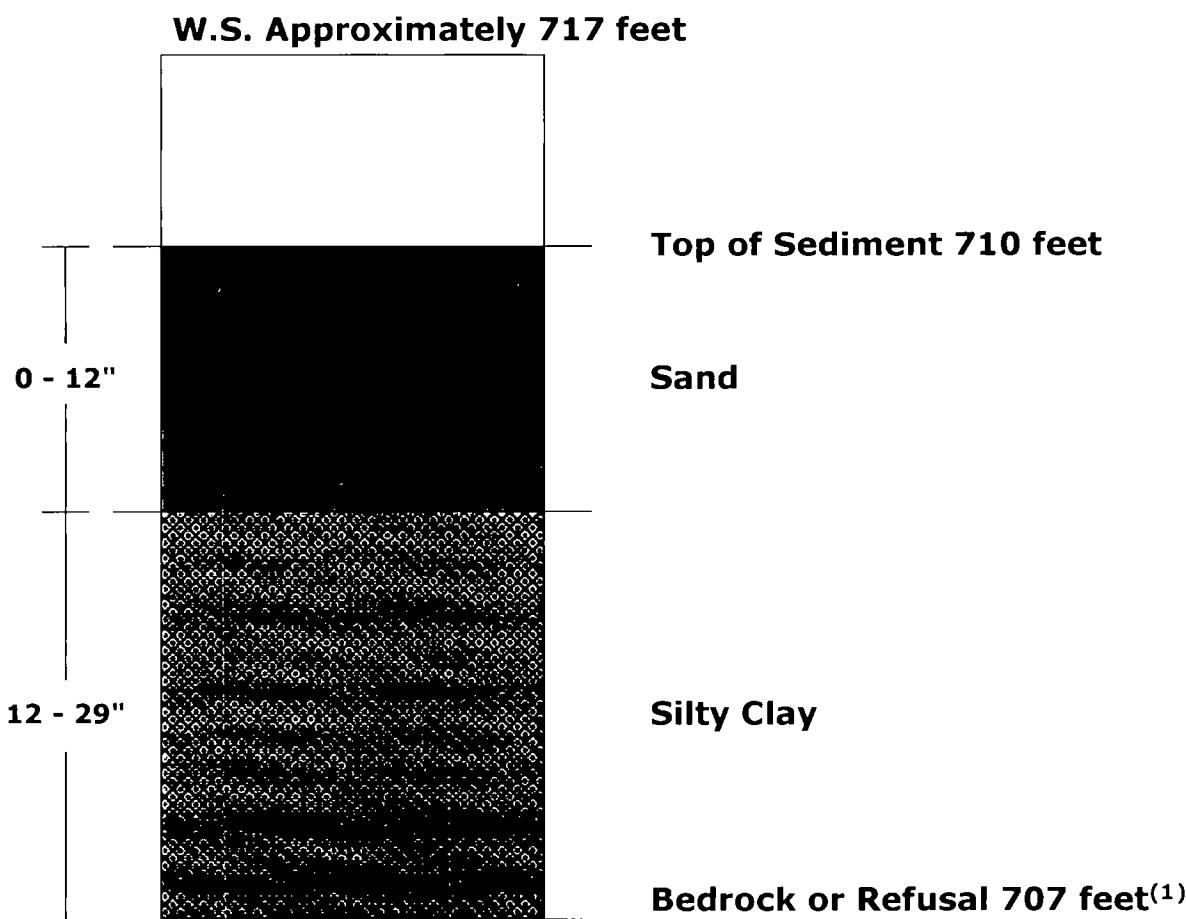
Clay

Silty Sand

Bedrock or Refusal 697 feet

# Woodside - II (T-4)

(PCB)

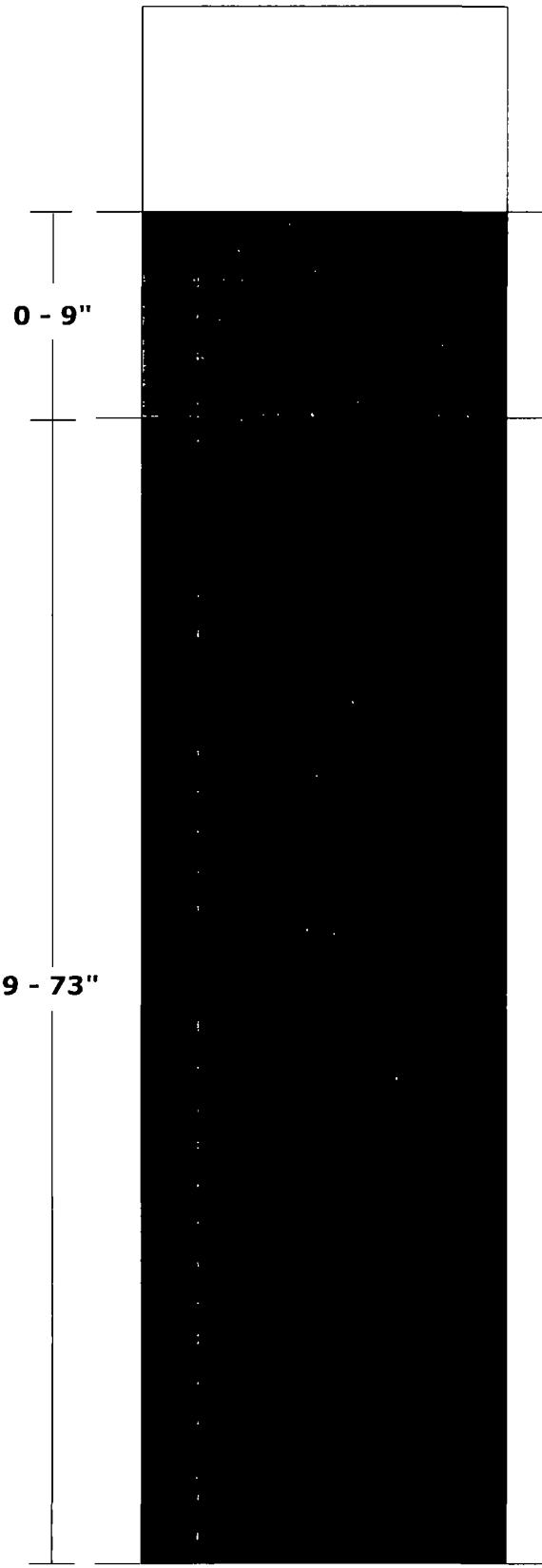


<sup>(1)</sup> Core sample taken at T-4 for grain size analysis places bedrock at approximately 697 feet.

# Woodside II (T-4)

(Grain Size)

W.S. Approximately 717 feet



Bedrock or Refusal 697 feet

SIEVE ANALYSIS

PROJECT: 12 Mile Creek August & September 2002

SAMPLE ID: Woodside 2-T4 No depth 9/11/02

FILE IS: ws2t4

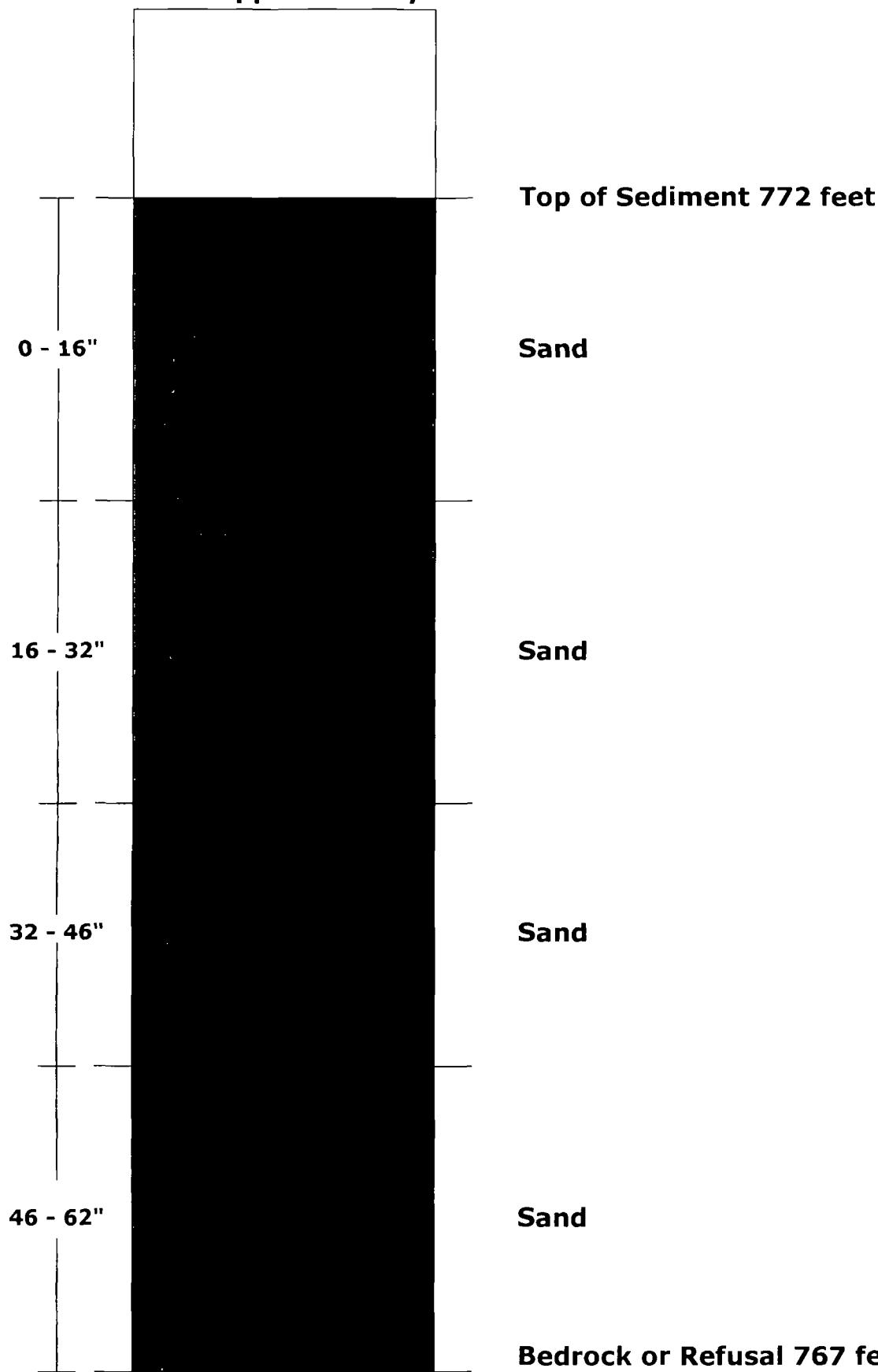
MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50 800	2 in				
38 100	1-1/2 in				
25.400	1 in				
19.050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6.727	No. 3				
4.760	No. 4				
4.000	No. 5	.0000	.000	.000	100.000
3.360	No. 6	.5000	.444	.444	99.556
2.380	No 8				
2.000	No.10	4.8000	4.259	4 703	95.297
1.414	No 14				
1.190	No.16				
1.000	No.18				
.840	No.20	39 3600	34 928	39 631	60.369
590	No 30				
500	No 35				
420	No 40	45.8300	40.669	80 300	19.700
297	No.50				
.250	No 60				
210	No 70	14.6600	13.009	93 309	6 691
149	No.100	3.6000	3.195	96 504	3 496
125	No 120				
.105	No 140				
.074	No 200	2.9600	2.627	99.130	870
.063	No.230	.2000	.177	99.308	.692
	PAN	7800	.692	100 000	.000
TOTAL WEIGHT IN GRAMS 112 6900					

D95 = 1 9853 mm	D90 = 1 7535 mm	D85 = 1.5487 mm
D80 = 1.3678 mm	D75 = 1.2081 mm	D70 = 1.0670 mm
D65 = 9424 mm	D60 = .8347 mm	D55 = .7665 mm
D50 = 7039 mm	D45 = 6464 mm	D40 = 5936 mm
D35 = 5451 mm	D30 = 5006 mm	D25 = 4597 mm
D20 = 4222 mm	D15 = 3270 mm	D10 = 2505 mm
D 5 = 1751 mm		

# Easley Central Water District (T-1)

(PCB)

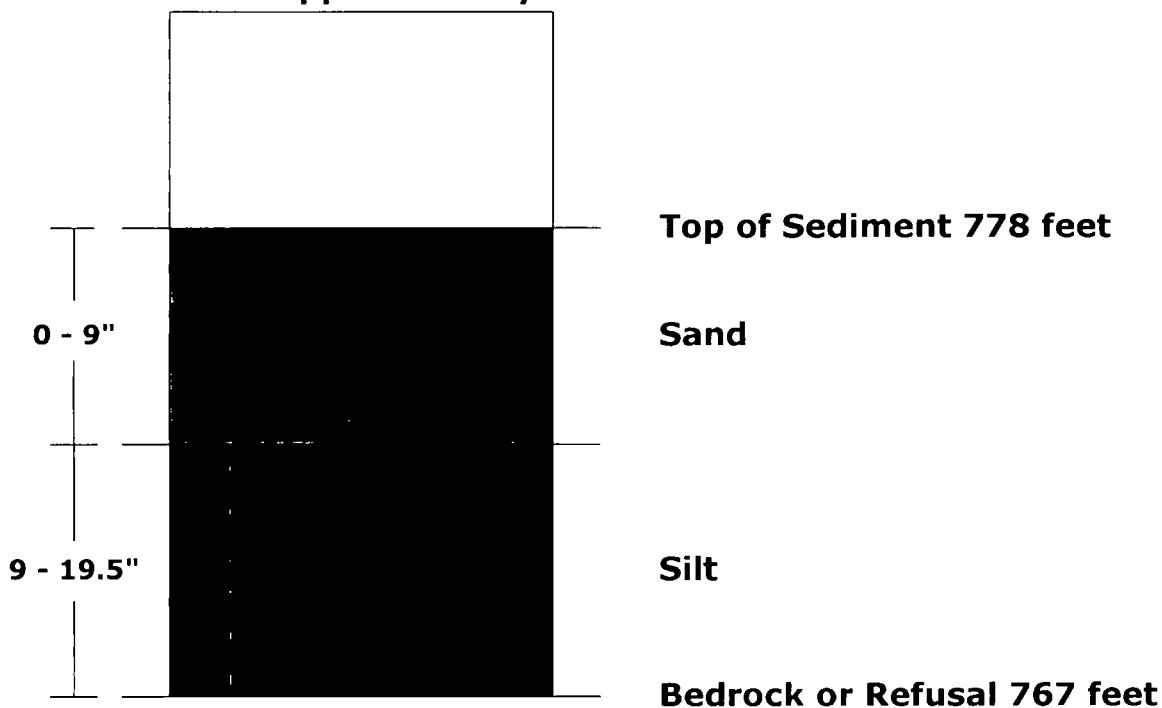
W.S. Approximately 784 feet



# Easley Central Water District (T-1)

(Grain Size)

W.S. Approximately 784 feet



SIEVE ANALYSIS

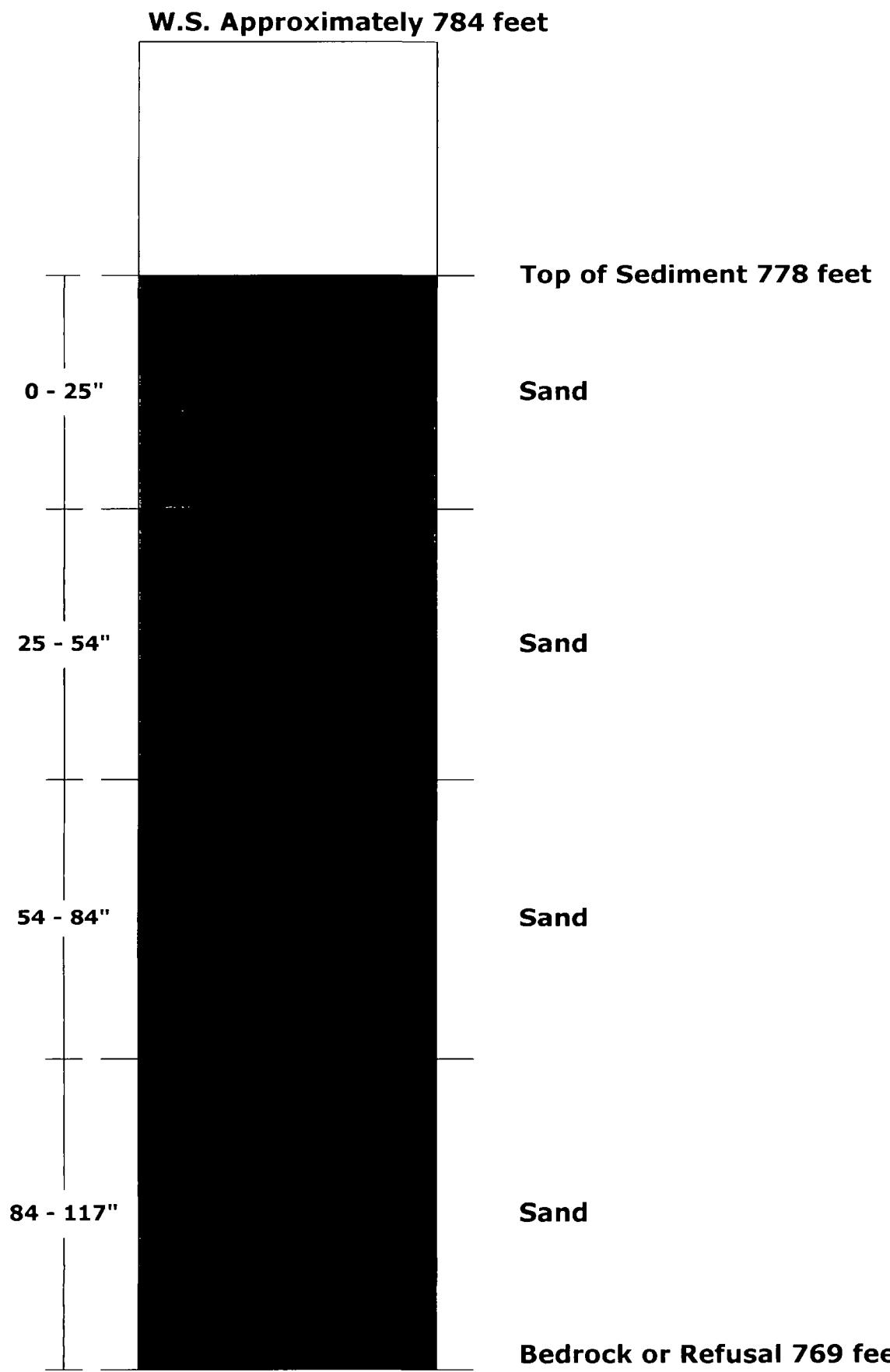
PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID ECWD-T1 1100 No depth \*some leaf fragments  
 FILE IS. ecwdt1

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50.800	2 in				
38.100	1-1/2 in				
25.400	1 in				
19.050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6 727	No.3	0000	000	000	100.000
4 760	No 4	2 0600	1 229	1 229	98 771
4.000	No.5				
3.360	No 6	2 1100	1 259	2 488	97 512
2 380	No.8				
2 000	No.10	6.3700*	3.801	6.289	93.711
1 414	No 14				
1 190	No 16				
1.000	No 18				
840	No.20	36.2800*	21 648	27 937	72 063
.590	No 30				
.500	No 35				
420	No 40	67.5200*	40.289	68 226	31 774
297	No 50				
250	No.60				
210	No.70	39 4700	23 552	91.778	8.222
149	No 100	6 1200	3 652	95.429	4 571
125	No.120				
105	No 140				
.074	No 200	4 8100	2 870	98 299	1.701
.063	No.230	5000	298	98 598	1 402
	PAN	2 3500	1 402	100 000	000
TOTAL WEIGHT IN GRAMS		167 5900			

D95 =	2.3848 mm	D90 =	1 7236 mm	D85 =	1 4107 mm
D80 =	1.1546 mm	D75 =	9449 mm	D70 =	8107 mm
D65 =	.7439 mm	D60 =	6826 mm	D55 =	.6263 mm
D50 =	.5747 mm	D45 =	5273 mm	D40 =	4839 mm
D35 =	4440 mm	D30 =	.3986 mm	D25 =	3441 mm
D20 =	2970 mm	D15 =	2564 mm	D10 =	2213 mm
D 5 =	1551 mm				

# Easley Central Water District (T-2)

(PCB)

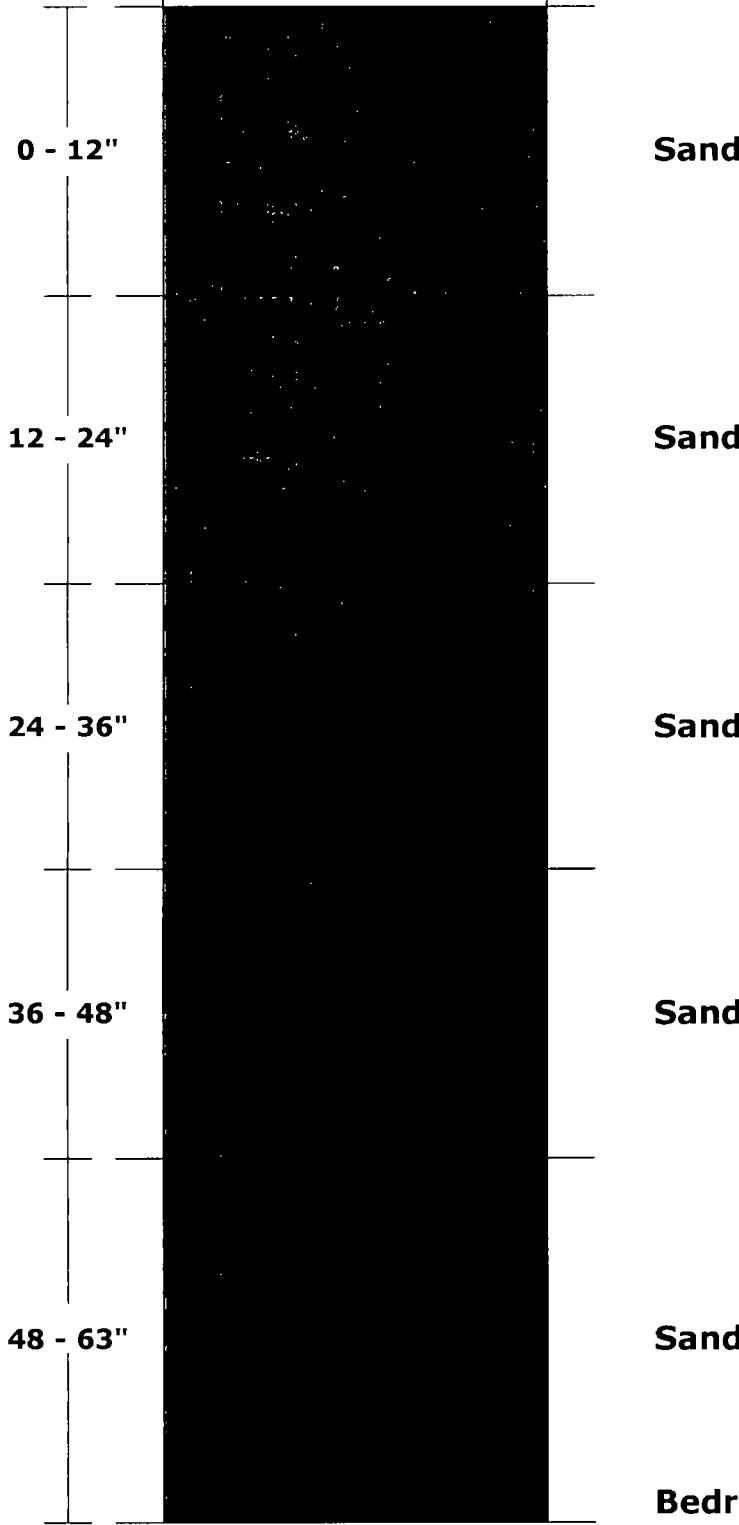


# Easley Central Water District (between T-2 and T-3)

(Grain Size)

Top of Sediment 784 feet

Note: Sample taken on Sandbar



### SIEVE ANALYSIS

PROJECT: 12 Mile Creek August & September 2002

SAMPLE ID: ECWD-T2 & T3 1130 0-36"

FILE IS: ecwdt2t3 36

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50 800	2 in				
38 100	1-1/2 in				
25.400	1 in				
19.050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6.727	No.3	0000	000	000	100 000
4.760	No.4	2000	.113	.113	99 887
4.000	No.5				
3.360	No.6	8300	.468	.581	99 419
2.380	No.8				
2.000	No.10	4.5600	2.572	3.153	96.847
1.414	No.14				
1.190	No.16				
1.000	No.18				
.840	No.20	43 4200	24 494	27 647	72.353
.590	No.30				
.500	No.35				
.420	No 40	60 6200	34.196	61.844	38 156
.297	No 50				
.250	No 60				
.210	No 70	53.7300	30.310	92 153	7 847
.149	No.100	10.2400	5.776	97 930	2.070
.125	No 120				
.105	No 140				
.074	No.200	2.9600	1 670	99 599	401
.063	No 230	.0800	.045	99.645	355
	PAN	6300	.355	100 000	000
<b>TOTAL WEIGHT IN GRAMS</b>		<b>177</b>	<b>2700</b>		

D95 = 1 8734 mm	D90 = 1 5693 mm	D85 = 1 3147 mm
D80 = 1 1013 mm	D75 = 9226 mm	D70 = .8009 mm
D65 = 7237 mm	D60 = 6539 mm	D55 = 5909 mm
D50 = .5340 mm	D45 = 4825 mm	D40 = 4360 mm
D35 = .3908 mm	D30 = .3485 mm	D25 = 3109 mm
D20 = 2773 mm	D15 = .2473 mm	D10 = .2206 mm
D 5 = 1773 mm		

### SIEVE ANALYSIS

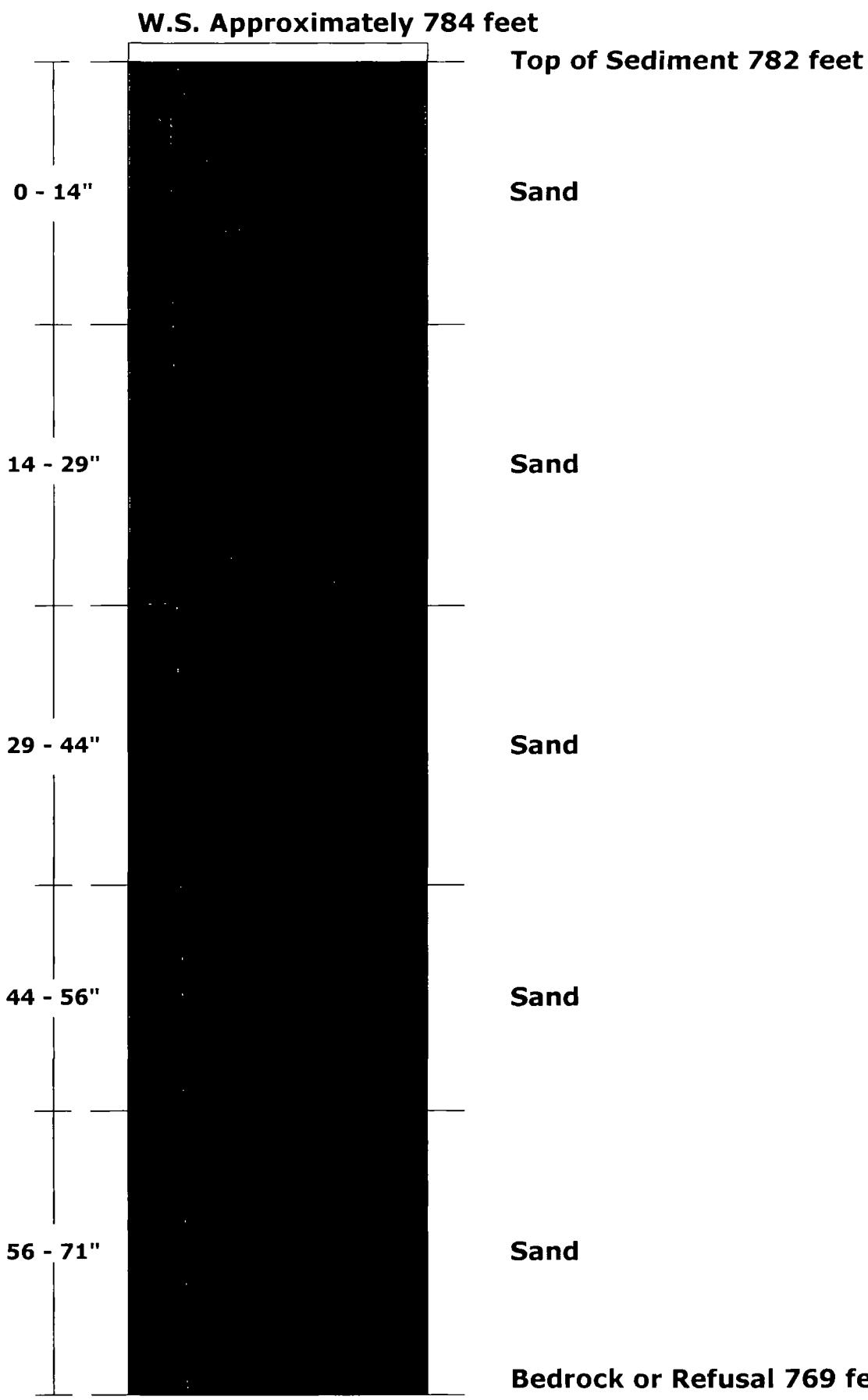
PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID ECWD-T2 & T3 1130 36-63"  
 FILE IS ecwdt2t3.63

MILLIMETERS OR NUMBER	SIEVE SIZE OR NUMBER	WEIGHT		PERCENT	
		IN GRAMS	RETAINED PARTIAL	TOTAL	FINER BY WEIGHT
76 200	3 in				
50 800	2 in				
38.100	1-1/2 in				
25.400	1 in				
19 050	3/4 in				
12 700	1/2 in				
9.525	3/8 in				
6 727	No.3				
4.760	No.4				
4.000	No 5	.0000	.000	.000	100.000
3 360	No 6	7600	.418	.418	99.582
2 380	No 8				
2 000	No.10	2 5900	1.424	1.842	98 158
1.414	No 14				
1.190	No.16				
1.000	No 18				
.840	No.20	38.3500	21 086	22 928	77 072
.590	No.30				
500	No 35				
420	No 40	79 6100	43 773	66.701	33.299
.297	No 50				
250	No 60				
210	No 70	52.3400	28 779	95 480	4.520
149	No 100	6.2400	3 431	98 911	1 089
.125	No 120				
105	No.140				
.074	No.200	1.4900	.819	99.731	.269
.063	No 230	.0800	044	99 775	225
	PAN	.4100	225	100.000	000
TOTAL WEIGHT IN GRAMS		181.8700			

D95 =	1 7563 mm	D90 =	1 4298 mm	D85 =	1 1640 mm
D80 =	9475 mm	D75 =	8129 mm	D70 =	7510 mm
D65 =	.6938 mm	D60 =	.6410 mm	D55 =	.5922 mm
D50 =	.5472 mm	D45 =	.5055 mm	D40 =	.4670 mm
D35 =	.4315 mm	D30 =	.3879 mm	D25 =	.3439 mm
D20 =	3049 mm	D15 =	.2703 mm	D10 =	.2396 mm
D 5 =	.2124 mm				

# Easley Central Water District (T-3)

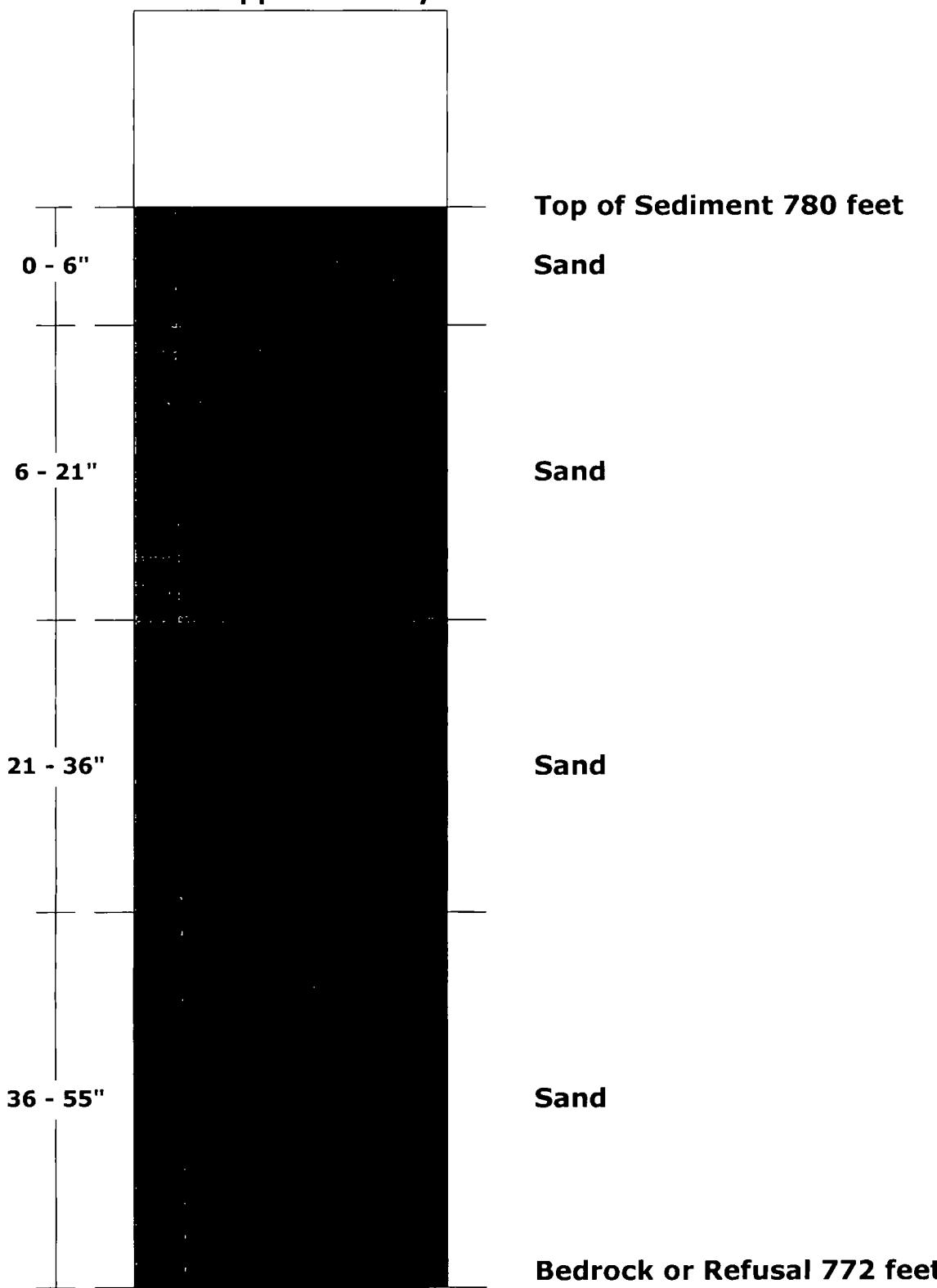
(PCB)



# Easley Central Water District (T-4)

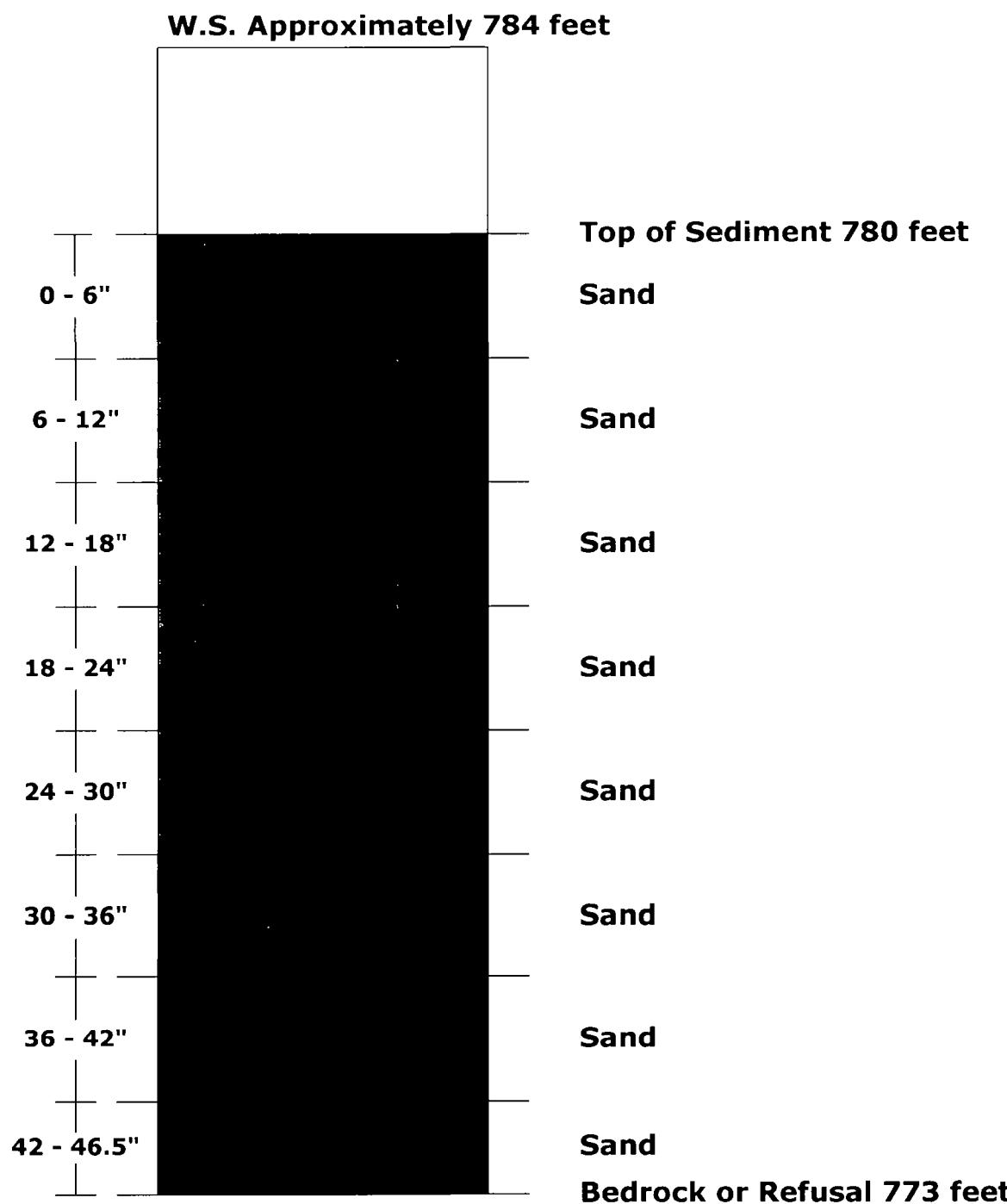
(PCB)

W.S. Approximately 784 feet



# Easley Central Water District (T-4)

(Grain Size)



SIEVE ANALYSIS

PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID ECWD-T4 1300 0-24"  
 FILE IS ecwdt4

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED IN GRAMS	PARTIAL	TOTAL	FINER BY WEIGHT
76 200	3 in				
50.800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12 700	1/2 in				
9.525	3/8 in				
6.727	No.3	.0000	000	.000	100 000
4.760	No 4	4 0000	2 126	2 126	97 874
4 000	No 5				
3 360	No 6	5 2600	2.796	4 923	95.077
2.380	No.8				
2.000	No 10	13.2000	7.017	11.940	88.060
1.414	No.14				
1.190	No.16				
1.000	No.18				
.840	No.20	66 3000	35 245	47.185	52.815
.590	No 30				
.500	No.35				
.420	No.40	80 1400	42.603	89 788	10.212
.297	No.50				
.250	No.60				
.210	No 70	16 5600	8.803	98.591	1 409
149	No.100	1 3600	.723	99.314	686
125	No 120				
105	No 140				
.074	No 200	7600	.404	99.718	282
063	No 230	0700	037	99.755	245
	PAN	.4600	245	100 000	000
TOTAL WEIGHT IN GRAMS		188.1100			

D95 = 3.3408 mm	D90 = 2.3084 mm	D85 = 1.8549 mm
D80 = 1.6401 mm	D75 = 1.4502 mm	D70 = 1 2823 mm
D65 = 1.1338 mm	D60 = 1.0025 mm	D55 = 8864 mm
D50 = 8024 mm	D45 = .7397 mm	D40 = .6819 mm
D35 = 6286 mm	D30 = 5795 mm	D25 = .5342 mm
D20 = .4925 mm	D15 = 4540 mm	D10 = .4130 mm
D 5 = 2786 mm		

SIEVE ANALYSIS

PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID: BS-1C 0900 8/9/02  
 FILE IS: bs1c0900

MILLIMETERS OR NUMBER	SIEVE SIZE RETAINED IN GRAMS	WEIGHT PERCENT PARTIAL	PERCENT FINER TOTAL		PERCENT BY WEIGHT
			.000	.000	
76 200	3 in				
50.800	2 in				
38.100	1-1/2 in				
25.400	1 in				
19.050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6 727	No 3	0000	.000	.000	100 000
4 760	No 4	4 6800	2.221	2.221	97 779
4 000	No 5				
3 360	No.6	5.0200	2.383	4 604	95.396
2.380	No.8				
2.000	No.10	18.1200	8 601	13 205	86 795
1 414	No.14				
1.190	No.16				
1.000	No.18				
.840	No.20	79.9800	37.963	51.168	48.832
.590	No.30				
.500	No.35				
420	No.40	65 7600	31.213	82 381	17 619
297	No.50				
250	No.60				
210	No.70	33.0300	15 678	98 059	1 941
149	No.100	3.2800	1 557	99 616	.384
.125	No.120				
.105	No.140				
074	No.200	5700	.271	99 886	.114
.063	No.230	.0500	.024	99 910	.090
	PAN	.1900	090	100 000	000
TOTAL WEIGHT IN GRAMS		210.6800			

D95 = 3.2807 mm	D90 = 2 4265 mm	D85 = 1 9196 mm
D80 = 1 7124 mm	D75 = 1 5275 mm	D70 = 1.3625 mm
D65 = 1.2154 mm	D60 = 1.0842 mm	D55 = .9671 mm
D50 = 8627 mm	D45 = .7715 mm	D40 = .6904 mm
D35 = 6178 mm	D30 = .5529 mm	D25 = 4948 mm
D20 = 4428 mm	D15 = .3741 mm	D10 = 2999 mm
D 5 = 2404 mm		

## SIEVE ANALYSIS

PROJECT 12 Mile Creek August & September 2002  
 SAMPLE ID BS-1C 9/11/02  
 FILE IS bs1c911

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED IN GRAMS	PERCENT RETAINED PARTIAL	TOTAL	FINER BY WEIGHT
76.200	3 in				
50.800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12.700	1/2 in				
9 525	3/8 in				
6 727	No 3	.0000	000	000	100 000
4 760	No 4	1.9200	1 002	1 002	98.998
4 000	No 5				
3 360	No.6	2.7000	1.410	2 412	97 588
2.380	No.8				
2.000	No.10	10.6100	5.540	7.952	92.048
1.414	No.14				
1.190	No.16				
1.000	No.18				
.840	No 20	68.7400	35.890	43 842	56.158
.590	No 30				
.500	No 35				
.420	No 40	76.6800	40.036	83.877	16.123
.297	No.50				
.250	No 60				
.210	No.70	25.5700	13.350	97.228	2.772
.149	No 100	3.9500	2.062	99.290	710
.125	No.120				
.105	No 140				
.074	No 200	1.1500	.600	99 890	110
.063	No 230	.0200	.010	99 901	.099
	PAN	1900	.099	100 000	.000
TOTAL WEIGHT IN GRAMS		191 5300			

D95 = 2 6368 mm	D90 = 1 9034 mm	D85 = 1 6867 mm
D80 = 1.4947 mm	D75 = 1.3245 mm	D70 = 1 1738 mm
D65 = 1 0401 mm	D60 = .9217 mm	D55 = 8233 mm
D50 = 7550 mm	D45 = .6924 mm	D40 = 6350 mm
D35 = 5824 mm	D30 = .5341 mm	D25 = 4898 mm
D20 = 4492 mm	D15 = .3962 mm	D10 = 3056 mm
D 5 = .2357 mm		

## SIEVE ANALYSIS

PROJECT. 12 Mile Creek August & September 2002  
 SAMPLE ID Between EC & Woodside 1 9/11/02 (2C)  
 FILE IS ecws1

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50.800	2 in				
38 100	1-1/2 in				
25 400	1 in				
19 050	3/4 in				
12.700	1/2 in				
9.525	3/8 in				
6 727	No 3	0000	000	000	100 000
4 760	No 4	1.1300	1.149	1.149	98 851
4 000	No.5				
3.360	No.6	1.9000	1.931	3.080	96 920
2 380	No.8				
2 000	No.10	6 7100	6 820	9.900	90 100
1.414	No.14				
1.190	No.16				
1.000	No.18				
.840	No.20	21.1300	21 478	31.378	68 622
.590	No.30				
500	No 35				
420	No 40	22 8400	23.216	54 594	45.406
297	No 50				
250	No 60				
210	No.70	38 3600	38 992	93.586	6 414
149	No 100	5 2800	5 367	98 953	1 047
125	No 120				
105	No 140				
.074	No.200	7500	.762	99.715	285
.063	No.230	.0600	.061	99 776	224
	PAN	2200	224	100.000	000
TOTAL WEIGHT IN GRAMS		98.3800			

D95 = 2.9034 mm	D90 = 1 9920 mm	D85 = 1 6277 mm
D80 = 1.3301 mm	D75 = 1 0868 mm	D70 = 8881 mm
D65 = .7539 mm	D60 = 6494 mm	D55 = .5593 mm
D50 = 4818 mm	D45 = .4170 mm	D40 = 3815 mm
D35 = 3491 mm	D30 = 3194 mm	D25 = 2922 mm
D20 = 2674 mm	D15 = 2446 mm	D10 = 2238 mm
D 5 = 1918 mm		

## SIEVE ANALYSIS

PROJECT: 12 Mile Creek August &amp; September 2002

SAMPLE ID BS-3C 9/11/02

FILE IS: bs3c911

MILLIMETERS OR NUMBER	SIEVE SIZE IN GRAMS	WEIGHT		PERCENT	
		RETAINED PARTIAL	RETAINED TOTAL	FINER BY WEIGHT	
76 200	3 in				
50.800	2 in				
38.100	1-1/2 in				
25 400	1 in				
19.050	3/4 in				
12 700	1/2 in				
9.525	3/8 in				
6.727	No.3	0000	000	000	100 000
4 760	No.4	1 1500	647	647	99 353
4 000	No.5				
3.360	No.6	2.0800	1.170	1.817	98.183
2 380	No.8				
2 000	No 10	7.8900	4 439	6.256	93.744
1.414	No.14				
1.190	No 16				
1.000	No 18				
.840	No 20	64 9300	36 529	42 785	57.215
.590	No.30				
.500	No.35				
.420	No.40	69 9400	39.347	82 132	17.868
.297	No.50				
.250	No.60				
.210	No 70	25.2500	14 205	96 338	3 662
.149	No 100	4 9200	2 768	99.105	895
.125	No 120				
.105	No.140				
.074	No 200	1.3800	776	99.882	118
.063	No 230	0300	.017	99.899	101
	PAN	1800	101	100 000	000
TOTAL WEIGHT IN GRAMS		177	7500		

D95 = 2.3162 mm      D90 = 1.8298 mm      D85 = 1 6250 mm  
 D80 = 1.4430 mm      D75 = 1.2815 mm      D70 = 1.1380 mm  
 D65 = 1 0106 mm      D60 = .8974 mm      D55 = .8079 mm  
 D50 = 7397 mm      D45 = .6774 mm      D40 = 6203 mm  
 D35 = 5680 mm      D30 = 5201 mm      D25 = .4762 mm  
 D20 = 4361 mm      D15 = 3652 mm      D10 = .2861 mm  
 D 5 = 2242 mm

# **Appendix F**

## **Sediment and Core Sample**

### **Polychlorinated Biphenyl Laboratory Data**

---

copy: GSM, M3P, FW

Re: JMB

EN CHEM  
INC.

Corporate Office & Laboratory  
1241 Bellevue Street, Suite 9 • Green Bay, WI 54302  
920-469-2436 • FAX 920-469-8827 • 800-7-ENCHEM  
[www.enchem.com](http://www.enchem.com)

Project Name: SANGAMO 12 MILE CREEK

Project Number: 70923 09

RMT - GREENVILLE

ATTN:

100 VERDAE BLVD (29607)

GREENVILLE

SC 29606

Attached are the following for Batch Number 826595

Organic

Inorganic

QC Data

Diskette

Ship By:  First Class Mail

FedEx

Priority Mail

Other \_\_\_\_\_

Comments:

QC-WMB, 11-5-02

HT, temp, COC, pres, methods, etc.

Unit 2 QC ✓

If you have any questions please call your Client Manager Tom Trainor

**- Analytical Report -**

Project Name . SANGAMO 12 MILE CREEK

Project Number . 70923 09

Client. RMT - GREENVILLE

South Carolina Cert# 83006001

Sample No	Field ID	Collection Date	Sample No.	Field ID	Collection Date
826595-001	BETW LAY & MAY BRIDGE #1	10/2/2002			
826595-002	BETW LAY & MAY BRIDGE #4	10/2/2002			
826595-003	BETW LAY & MAY BRIDGE #3	10/2/2002			
826595-004	BETW LAY & MAY BRIDGE #5	10/2/2002			
826595-005	BETW LAY & MAY BRIDGE #6	10/2/2002			
826595-006	BETW LAY & MAY BRIDGE #2	10/2/2002			

Please visit our Internet homepage at [www.enchem.com](http://www.enchem.com)

The "J" flag is present when a parameter has been detected below the EQL but at or above the MDL

Soil VOC detects are corrected for the total solids, unless otherwise noted

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.



Approval Signature

Date

RMT®

**CHAIN OF CUSTODY RECORD**

EMA Level 2

00 Verde Boulevard, PO Box 16778 • Greenville, SC 29606-6778 • Phone (864) 281-0030 • Fax (864) 281-0288

Project No	Project/Client
70923.09	SANIGUARD 12 mile creek.
Project Manager/Contact Person	M. Parker / G. Mitchell //

Project No 70923-09 Sampled 12 miles west. M. Parker / G. Mitchell								Filtered (Yes/No) <input checked="" type="checkbox"/>			
Project Client				Preserved (Code) <input checked="" type="checkbox"/>							
Project Manager/Contact Person											
Analyses Requested		Analyses Requested		Analyses Requested		Analyses Requested		Analyses Requested		Analyses Requested	
Total Number of Containers		Matrix		Comments							
Lab No		Date	Time	Sample Station ID							
001	10/2	1415	Between Hwy 11 & Hwy 11	#1		soil	1				
002		1400	11 11 11 11	#4			-				
003		1430	11 .. .. ..	#3			-				
004		1445	11 .. .. ..	#5			-				
005		1500	11 .. .. ..	#6			-				
006	10/2	1515	11 .. .. ..	#2		soil	1				
SPECIAL INSTRUCTIONS Airbase 608/9584 #75											
SAMPLER Relinquished by (Sig) <i>Lay Schmitz</i>	Date/Time <i>10/2/02 1600</i>	Received by (Sig) <i>Air Force</i>	Date/Time <i>10/2/02 1830</i>	HAZARDS ASSOCIATED WITH SAMPLES		Turn Around (circle one)		Normal	Rush		
Relinquished by (Sig) <i>Airbase</i>	Date/Time <i>10/3/02 0945</i>	Received by (Sig) <i>Kent Finkenrath</i>	Date/Time <i>10/3/02 0945</i>	<input type="checkbox"/> Flammable	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Highly Toxic	<input type="checkbox"/> Other (list) <i>1.0°C</i>				
Relinquished by (Sig) <i>Airbase</i>	Date/Time	Received by (Sig) <i>N/A</i>	Date/Time	<input type="checkbox"/> Flammable	<input type="checkbox"/> Corrosive	<input type="checkbox"/> Highly Toxic	<input type="checkbox"/> Other (list) <i>(Wet/Metals)</i>	Receipt Temp	Temp Blank <input checked="" type="checkbox"/> N		
Custody Seal Present/Absent <input checked="" type="checkbox"/>	Intact/Not Intact	Seal #'s									

# En Chem, Inc. Cooler Receipt Log

Batch No 826595

Project Name or ID 7092309

No of Coolers 1 Temps 1.0°C

A. Receipt Phase Date cooler was opened 10/3/02 By KP

- |  |   |  |                        |
|--|---|--|------------------------|
| 1 Were samples received on ice? (Must be ≤ 6 C)                    | <input checked="" type="checkbox"/> YES   | NO <sup>2</sup>                        |                        |
| 2 Was there a Temperature Blank?                                   | <input type="checkbox"/> YES              | <input checked="" type="checkbox"/> NO |                        |
| 3 Were custody seals present and intact? (Record on COC)           | <input type="checkbox"/> YES              | <input checked="" type="checkbox"/> NO |                        |
| 4 Are COC documents present?                                       | <input checked="" type="checkbox"/> YES   | NO <sup>2</sup>                        |                        |
| 5 Does this Project require quick turn around analysis?            | <input type="checkbox"/> YES              | <input checked="" type="checkbox"/> NO |                        |
| 6 Is there any sub-work?   | <input type="checkbox"/> YES              | <input checked="" type="checkbox"/> NO |                        |
| 7 Are there any short hold time tests?                             | <input type="checkbox"/> YES              | <input checked="" type="checkbox"/> NO |                        |
| 8 Are any samples nearing expiration of hold-time? (Within 2 days) | <input type="checkbox"/> YES <sup>1</sup> | <input checked="" type="checkbox"/> NO | Contacted by/Who _____ |
| 9 Do any samples need to be Filtered or Preserved in the lab?      | <input type="checkbox"/> YES <sup>1</sup> | <input checked="" type="checkbox"/> NO | Contacted by/Who _____ |

B Check-in Phase Date samples were Checked-in: 10/3/02 By KP

- |   |   |                 |  |
|---|---|-----------------|--|
| 1 Were all sample containers listed on the COC received and intact?   | <input checked="" type="checkbox"/> YES | NO <sup>2</sup> | NA                                     |
| 2 Sign the COC as received by En Chem Completed                       | <input checked="" type="checkbox"/> YES | NO              |  |
| 3 Do sample labels match the COC?                                     | <input checked="" type="checkbox"/> YES | NO <sup>2</sup> |  |
| 4 Check sample pH of preserved samples (Not VOCs) Completed           | <input type="checkbox"/> YES            | NO              | <input checked="" type="checkbox"/> NA |
| 5 Do samples have correct chemical preservation?                      | <input type="checkbox"/> YES            | NO <sup>2</sup> | <input checked="" type="checkbox"/> NA |
| 6 Are dissolved parameters field filtered? .                          | <input type="checkbox"/> YES            | NO <sup>2</sup> | <input checked="" type="checkbox"/> NA |
| 7 Are sample volumes adequate for tests requested?                    | <input checked="" type="checkbox"/> YES | NO <sup>2</sup> |  |
| 8 Are VOC samples free of bubbles >6mm                                | <input type="checkbox"/> YES            | NO <sup>2</sup> | <input checked="" type="checkbox"/> NA |
| 9 Enter samples into logbook Completed                                | <input checked="" type="checkbox"/> YES | NO              |  |
| 10 Place laboratory sample number on all containers and COC Completed | <input checked="" type="checkbox"/> YES | NO              |  |
| 11 Complete Laboratory Tracking Sheet (LTS) Completed                 | <input type="checkbox"/> YES            | NO              | <input checked="" type="checkbox"/> NA |
| 12 Start Nonconformance form  | <input type="checkbox"/> YES            | NO              | <input checked="" type="checkbox"/> NA |
| 13 Initiate Subcontracting procedure Completed                        | <input type="checkbox"/> YES            | NO              | <input checked="" type="checkbox"/> NA |
| 14 Check laboratory sample number on all containers and COC           | <input checked="" type="checkbox"/> YES | NO              | NA                                     |

## Short Hold-time tests

48 Hours or less	7 days	Footnotes
Coliform (6 hrs)	Flashpoint	1 Notify proper lab group immediately
Hexavalent Chromium (24 Hrs)	TSS	2 Complete nonconformance memo
BOD	Total Solids	
Nitrite or Nitrate	TDS	
Low Level Mercury	Sulfide	
Ortho Phosphorus	Free Liquids	
Turbidity	Total Volatile Solids	
Surfactants	Aqueous Extractable Organics- ALL	
Sulfite	Unpreserved VOC's	
En Core Preservation	Ash	
Color		

Rev 9/5/2001, Attachment to 1-REC-5  
Subject to QA Audit

Reviewed by/date mp 10/7/02

**- Analytical Report -**Project Name **SANGAMO 12 MILE CREEK**Project Number **70923 09**Client : **RMT - GREENVILLE**Field ID **BETW. LAY & MAY BRIDGE #1**Report Date **10/31/2002**Lab Sample Number **826595-001**Collection Date **10/2/2002**South Carolina No **83006001**Matrix Type **SOIL****Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	46.1	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**PCB LIST - SOIL                      Prep Method **SW846 3550B**    Prep Date **10/14/2002**    Analyst **KIO**

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 72	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 72	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 72	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 72	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	690	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	690	72	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 72	72	ug/kg		10/29/2002	SW846 8082

**- Analytical Report -**

Project Name **SANGAMO 12 MILE CREEK**  
Project Number **70923 09** Client **RMT - GREENVILLE**  
Field ID **BETW. LAY & MAY BRIDGE #4** Report Date **10/31/2002**  
Lab Sample Number **826595-002** Collection Date **10/2/2002**  
South Carolina No **83006001** Matrix Type **SOIL**

**Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	52.1	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**

PCB LIST - SOIL Prep Method: SW846 3550B Prep Date: 10/14/2000 Analyst: KIO

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	510	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	620	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 64	64	ug/kg		10/29/2002	SW846 8082

**- Analytical Report -**

Project Name SANGAMO 12 MILE CREEK

Project Number 70923 09

Client RMT - GREENVILLE

Field ID BETW LAY &amp; MAY BRIDGE #3

Report Date 10/31/2002

Lab Sample Number 826595-003

Collection Date 10/2/2002

South Carolina No 83006001

Matrix Type SOIL

**Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	39.4	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**

PCB LIST - SOIL Prep Method SW846 3550B Prep Date 10/14/2002 Analyst KIO

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 85	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 85	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 85	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 85	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	820	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	770	85	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 85	85	ug/kg		10/29/2002	SW846 8082

**- Analytical Report -**

Project Name : SANGAMO 12 MILE CREEK

Project Number 70923 09

Client RMT - GREENVILLE

Field ID BETW LAY &amp; MAY BRIDGE #5

Report Date . 10/31/2002

Lab Sample Number 826595-004

Collection Date : 10/2/2002

South Carolina No 83006001

Matrix Type SOIL

**Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	61.2	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**

PCB LIST - SOIL Prep Method SW846 3550B Prep Date 10/14/200 Analyst KIO

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 54	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 54	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 54	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 54	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	400	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	470	54	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 54	54	ug/kg		10/29/2002	SW846 8082

**- Analytical Report -**Project Name **SANGAMO 12 MILE CREEK**Project Number **70923 09**Client **RMT - GREENVILLE**Field ID **BETW LAY & MAY BRIDGE #6**Report Date : **10/31/2002**Lab Sample Number . **826595-005**Collection Date **10/2/2002**South Carolina No . **83006001**Matrix Type : **SOIL****Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	52.0	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**PCB LIST - SOIL                          Prep Method **SW846 3550B**    Prep Date. **10/14/200**    Analyst. **KIO**

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 64	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	580	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	620	64	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 64	64	ug/kg		10/29/2002	SW846 8082

**- Analytical Report -**

Project Name **SANGAMO 12 MILE CREEK**  
Project Number **70923 09** Client **RMT - GREENVILLE**  
Field ID **BETW. LAY & MAY BRIDGE #2** Report Date **10/31/2002**  
Lab Sample Number **826595-006** Collection Date **10/2/2002**  
South Carolina No **83006001** Matrix Type : **SOIL**

**Inorganic Results**

Test	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	42.9	0.0100	%		10/8/2002	SM2540G	SM2540G

**Organic Results**

PCB LIST - SOIL Prep Method: SW846 3550B Prep Date. 10/14/2002 Analyst KIO

Analyte	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 78	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1221	< 78	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1232	< 78	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1242	< 78	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1248	590	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1254	770	78	ug/kg		10/29/2002	SW846 8082
Aroclor 1260	< 78	78	ug/kg		10/29/2002	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted

**Corporate Office & Laboratory**  
1241 Bellevue Street  
Green Bay WI 54302  
920-469-2436 • FAX 920-469-8827  
800-7-ENCHEM

**EN CHEM**  
**INC.**

**COPY FILE RET.WMB**  
**GSM, MBP**  
**Madison Office & Laboratory**  
525 Science Drive  
Madison, WI 53711  
608-232-3300 • FAX 608-233-0502  
888-5-ENCHEM

**- Analytical Report -**

Project Name . SCHLUMBERGER - 12 MILE CREEK  
Project Number 70923 09

Client RMT - GREENVILLE

Report Date 10/9/02

WI DNR LAB ID 113172950

Lab Sample No	Field ID	Collection Date	Lab Sample No	Field ID	Collection Date
923070-001	WOODSIDE1-T1 (40"-50")	9/12/02			
923070-002	WOODSIDE1-T2 (54"-71")	9/12/02			
923070-003	WOODSIDE1-T3 (0"-40")	9/12/02			
923070-004	WOODSIDE1-T4 (0"-64")	9/12/02			
923070-005	WOODSIDE2-T1 (0"-11 5")	9/12/02			
923070-006	WOODSIDE2-T1 (11 5"-40")	9/12/02			
923070-007	WOODSIDE2-T1 (40"-64")	9/12/02			
923070-008	WOODSIDE2-T2 (0"-18")	9/12/02			
923070-009	WOODSIDE2-T2 (55"-70")	9/12/02			
923070-010	WOODSIDE2-T3 (0"-18")	9/12/02			
923070-011	WOODSIDE2-T3 (51"-68")	9/12/02			
923070-012	WOODSIDE2-T4 (12"-29")	9/12/02			
923070-013	EASLEY CENTRAL-T1 (0"-24")	9/12/02			
923070-014	EASLEY CENTRAL-T1 (42"-62")	9/12/02			
923070-015	EASLEY CENTRAL-T2 (54"-84")	9/12/02			
923070-016	EASLEY CENTRAL-T2 (100"-117")	9/12/02			
923070-017	EASLEY CENTRAL-T3 (56"-71")	9/12/02			
923070-018	EASLEY CENTRAL-T4 (21"-36")	9/12/02			
923070-019	EASLEY CENTRAL-T4 (36"-55")	9/12/02			
923070-020	cancelled per client	9/12/02			
923070-021	cancelled per client	9/12/02			
923070-022	cancelled per client	9/12/02			
923070-023	cancelled per client	9/12/02			
923070-024	cancelled per client	9/12/02			
923070-025	cancelled per client	9/12/02			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this final report is authorized by Laboratory management, as is verified by the following signature

Lynn M Department for Tom Trainer 10-9-02  
Approval Signature Date

QC wmb, 10-1-02 : HT, temp, CEC, method, dL  
-prep HT ✓

**EN CHEM**  
**SAMPLE NARRATIVE**

PROJECT NAME            12 MILE CREEK – SCHLUMBERGER  
WORKORDER NUMBER    923070  
DATE                    4 October 2002

METALS

WET CHEMISTRY

VOLATILE ORGANICS

SEMIVOLATILE GC/MS

PESTICIDES

PCB's All samples were mercury shaken to remove sulfur and acid cleaned prior to analysis  
Surrogate recoveries failed in the original extract of sample "WOODSIDE2-T1 (0"-11 5") (923070-005) The sample was re-extracted Samples analyzed at dilutions were WOODSIDE1-T1 (40"-50") (923070-001) at 1 20 dilution, WOODSIDE1-T2 (54"-71") (923070-002) at 1 20 dilution, WOODSIDE2-T1 (40"-64") (923070-007) at 1 3 dilution, WOODSIDE2-T2 (0"-18") (923070-008) at dilution, WOODSIDE2-T2 (55"-70") (923070-009) at 1 3 dilution, WOODSIDE2-T3 (51"-68") (923070-011) at 1 2 dilution, and WOODSIDE2-T4 (12"-29") (923070-012) at 1 2 dilution  
Samples WOODSIDE2-T2 (0"-18") (923070-008), WOODSIDE2-T2 (55"-70") (923070-009), WOODSIDE2-T3 (51"-68") (923070-011), and WOODSIDE2-T4 (12"-29") (923070-012) had TMX surrogate failure TMX was marked with an "F" flag

HERBICIDES

OTHER (ANALYST SHOULD SPECIFY FRACTION)

**RWT**®

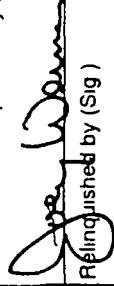
# CHAIN OF CUSTODY RECORD

No 74541

100 Verdae Boulevard, PO Box 16778 • Greenville, SC 29606-6778 • Phone (864) 281-0030 • Fax (864) 281-0288

Project No 70923-09 Project/Client Schubmenger 12 mile Creek  
Project Manager/Contact Person

Mike Parlier Greg Mitchell

Project No		Project/Client		Preserved (Code)		Filtered (Yes/No)		Comments		Analyses Requested	
70923-09		Schubmenger 12 mile Creek		A		N				B C D E F G	
Lab No		Yr	Date	Time	Sample Station ID	Total Number Of Containers	MATRIX				
01	12	01	9/12	Woodside 2-T3 (51"-68")	1	Sed	1				
02	12	01	9/12	Woodside 2-T4 (12"-29")	1	Sed	1				
03	12	01	9/12	Easley Central-T1 (0-24")	1	Sed	1				
04	12	01	9/12	Casley Central-T1 (42"-62")	1	Sed	1				
05	12	01	9/12	Easley Central-T2 (34"-84")	1	Sed	1				
06	12	01	9/12	Easley Central-T2 (100"-17")	1	Sed	1				
07	12	01	9/12	Easley Central-T3 (56"-71")	1	Sed	1				
08	12	01	9/12	Easley Central-T4 (2"-36")	1	Sed	1				
09	12	01	9/12	Easley Central-T4 (36"-55")	1	Sed	1				
SPECIAL INSTRUCTIONS Air Bill # 68406292-076 + 6840692-172											
SAMPLER Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	HAZARDS ASSOCIATED WITH SAMPLES	Turn Around (circle one)		Normal	Rush		
		1800	Air Bonus	1800	<input type="checkbox"/> Flammable						
Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	<input type="checkbox"/> Corrosive						
Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	<input type="checkbox"/> Highly Toxic						
Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	<input type="checkbox"/> Other (list)						
Custody Seal		Present/Absent	Intact/Not Intact	Seal #'s							
PINK SATIPEN/CLARITY											
WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX											
F-268 (R10/99)											
PINK SATIPEN/CLARITY											

**RMT**®

# CHAIN OF CUSTODY RECORD

No 74542

100 Verdae Boulevard, PO Box 16778 • Greenville, SC 29606-6778 • Phone (864) 281-0030 • Fax (864) 281-0288

Project No  
70923.09 Project/Client  
Project Manager/Contact Person

Mike Pavlik ✓ Green Mitchell

Total Number  
Of Containers

Sample Station ID

MATRIX

Project No 70923.09		Preserved (Code) A		Filtered (Yes/No) N		Preserved Codes A - NONE B - HNO <sub>3</sub> C - H <sub>2</sub> SO <sub>4</sub> D - NaOH E - HCl F - METHANOL G -	
Project/Client Schwamberger 12 mile Creek		Comments		Analyses Requested			
Lab No 020	Yr 02 Date 03070	Time 1330	Sample Station ID BS#1	Matrix Sed	Comments 1		
021	8/30	1330	BS#2	Sed	1		
022	8/30	1330	BS#3	Sed	1		
023	8/30	1330	BS#4	Sed	1		
024	8/30	1330	BS#5	Sed	1		
025	8/30	1330	BS#6	Sed	1		
SPECIAL INSTRUCTIONS							
SAMPLER Relinquished by (Sig) <u>John Danner</u>		Date/Time 1800 9-12-02	Received by (Sig) <u>Airborne</u>	Date/Time 1800 9-12-02	HAZARDS ASSOCIATED WITH SAMPLES	Normal	Rush
Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	<input type="checkbox"/> Flammable	Turn Around (circle one) Report Due _____	
Relinquished by (Sig)		Date/Time	Received by (Sig)	Date/Time	<input type="checkbox"/> Corrosive	(For Lab Use Only)	
Custody Seal		Present/Absent	Intact/Not Intact	Seal #'s	<input type="checkbox"/> Highly Toxic	Receipt Temp	
					<input type="checkbox"/> Other (list)	Temp Blank	Y N
Receipt pH (Wet/Metals)							

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## CHAIN OF CUSTODY RECORD

No 74540

100 Verde Boulevard, PO Box 16778 • Greenville, SC 29606-6778 • Phone (864) 281-0030 • Fax (864) 281-0288

Project No 70923.09 Project/Client Schluemenger - 12 mile Creek  
Project Manager/Contact Person

Mike Parker | Green Mitchell

Project No 70923.09		Project/Client Schluemenger - 12 mile Creek		MATRIX Total Number Of Containers	Comments	Preserved (Code) A	Filtered (Yes/No) N	Preserved Codes A - NONE B - HNO <sub>3</sub> C - H <sub>2</sub> SO <sub>4</sub> , D - NaOH E - HCl F - METHANOL G -	
		Analyses Requested D C B							
Lab No 91370	Yr 02	Date	Time	Sample Station ID					
001	9/12			Woodside 1-T1 (40"-50")	-	Sed	-		
002	9/12			Woodside 1-T2 (54"-71")	-	Sed	-		
003	9/12			Woodside 1-T3 (0"-40")	-	Sed	-		
004	9/12			Woodside 1-T4 (0"-64")	-	Sed	-		
005	9/12			Woodside 2-T1 (0"-115")	-	Sed	-		
006	9/12			Woodside 2-T1 (11.5"-40")	-	Sed	-		
007	9/12			Woodside 2-T1 (40"-64")	-	Sed	-		
008	9/12			Woodside 2-T2 (0"-18")	-	Sed	-		
009	9/12			Woodside 2-T2 (SS"-70")	-	Sed	-		
010	9/12			Woodside 2-T3 (0"-18")	-	Sed	-		
SPECIAL INSTRUCTIONS Airbiorne #68406292-076 + 6840692-172									
SAMPLER Relinquished by (Sig) <i>Jerry Donner</i>	Date/Time 1800	Received by (Sig)		Date/Time 1800	HAZARDS ASSOCIATED WITH SAMPLES		Turn Around (circle one)	Normal	Rush
Relinquished by (Sig) Airbiorne	Date/Time 9-12-02	<u>Airbiorne</u>		Date/Time 9-12-02	<input type="checkbox"/> Flammable		<input type="checkbox"/> Report Due _____		
Relinquished by (Sig) Airbiorne	Date/Time 9-13-02	<u>Airbiorne</u>		Date/Time 9-13-02	<input type="checkbox"/> Corrosive		<input type="checkbox"/> (For Lab Use Only)		
Relinquished by (Sig)	Date/Time	Received by (Sig)		Date/Time	<input type="checkbox"/> Highly Toxic		Recpt Temp 44°C	Recpt pH 7.0	Recpt Met/Mats (Wet/Metals) <i>N/A</i>
Custody Seal	Present/Absent	Intact/Not Intact	Seal #'s				<input type="checkbox"/> Temp Blank	<input checked="" type="checkbox"/> CV	<input type="checkbox"/> RT

**Corporate Office & Laboratory**  
1241 Bellevue Street  
Green Bay, WI 54302  
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800-7-ENCHEM



**Madison Office & Laboratory**  
525 Science Drive  
Madison WI 53711  
608-232-3300 • FAX 608-233-0502  
888-5-ENCHEM

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Client	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
		WI DNR LAB ID	113172950

Lab Sample No	Field ID	Collection Date	Lab Sample No	Field ID	Collection Date
923070-001	WOODSIDE1-T1 (40"-50")	9/12/02			
923070-002	WOODSIDE1-T2 (54"-71")	9/12/02			
923070-003	WOODSIDE1-T3 (0"-40")	9/12/02			
923070-004	WOODSIDE1-T4 (0"-64")	9/12/02			
923070-005	WOODSIDE2-T1 (0"-11 5")	9/12/02			
923070-006	WOODSIDE2-T1 (11 5"-40")	9/12/02			
923070-007	WOODSIDE2-T1 (40"-64")	9/12/02			
923070-008	WOODSIDE2-T2 (0"-18")	9/12/02			
923070-009	WOODSIDE2-T2 (55"-70")	9/12/02			
923070-010	WOODSIDE2-T3 (0"-18")	9/12/02			
923070-011	WOODSIDE2-T3 (51"-68")	9/12/02			
923070-012	WOODSIDE2-T4 (12"-29")	9/12/02			
923070-013	EASLEY CENTRAL-T1 (0"-24")	9/12/02			
923070-014	EASLEY CENTRAL-T1 (42"-62")	9/12/02			
923070-015	EASLEY CENTRAL-T2 (54"-84")	9/12/02			
923070-016	EASLEY CENTRAL-T2 (100"-117")	9/12/02			
923070-017	EASLEY CENTRAL-T3 (56"-71")	9/12/02			
923070-018	EASLEY CENTRAL-T4 (21"-36")	9/12/02			
923070-019	EASLEY CENTRAL-T4 (36"-55")	9/12/02			
923070-020	cancelled per client	9/12/02			
923070-021	cancelled per client	9/12/02			
923070-022	cancelled per client	9/12/02			
923070-023	cancelled per client	9/12/02			
923070-024	cancelled per client	9/12/02			
923070-025	cancelled per client	9/12/02			

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample narrative. Release of this final report is authorized by Laboratory management, as is verified by the following signature.

Lynn M. Dugay-Kreis for Tom Trainer 10-9-02  
Approval Signature Date

# En Chem, Inc. Cooler Receipt Log

Batch No 923076

Project Name or ID Schlumberger - 12 Mile Creek No of Coolers 2 Temps 4°, 4°C

1. Receipt Phase: Date cooler was opened: 9/13/02 By: KM

- Were samples received on ice? (Must be ≤ 6 C)  YES  NO<sup>2</sup>
- Was there a Temperature Blank?  YES  NO
- Were custody seals present and intact? (Record on COC)  YES  NO
- Are COC documents present?  YES  NO<sup>2</sup>
- Does this Project require quick turn around analysis?  YES  NO
- Is there any sub-work?  YES  NO
- Are there any short hold time tests?  YES  NO
- 8 Are any samples nearing expiration of hold-time? (Within 2 days)  YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_
- Do any samples need to be Filtered or Preserved in the lab?  YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_

B Check-in Phase. Date samples were Checked-in: 9/13/02 By: RTC

- Were all sample containers listed on the COC received and intact?  YES  NO<sup>2</sup>  NA
- 2 Sign the COC as received by En Chem Completed.  YES  NO
- Do sample labels match the COC?  YES  NO<sup>2</sup>
- 4 Check sample pH of preserved samples (Not VOCs) Completed  YES  NO  NA
- Do samples have correct chemical preservation?  YES  NO<sup>2</sup>  NA
- 6 Are dissolved parameters field filtered?  YES  NO<sup>2</sup>  NA
- Are sample volumes adequate for tests requested?  YES  NO<sup>2</sup>
- 8 Are VOC samples free of bubbles >6mm  YES  NO<sup>2</sup>  NA
- Enter samples into logbook Completed  YES  NO
- 10 Place laboratory sample number on all containers and COC Completed  YES  NO
- Complete Laboratory Tracking Sheet (LTS) Completed  YES  NO  NA
- Start Nonconformance form  YES  NO  NA
- 12 Initiate Subcontracting procedure Completed  YES  NO  NA
- Check laboratory sample number on all containers and COC  YES  NO  NA

## Short Hold-time tests.

4 Hours or less	7 days	Footnotes
Coliform (6 hrs)	Flashpoint	1 Notify proper lab group immediately
Hexavalent Chromium (24 Hrs)	TSS	2 Complete nonconformance memo
D	Total Solids	
Nitrite or Nitrate	TDS	
Low Level Mercury	Sulfide	
Ortho Phosphorus	Free Liquids	
Turbidity	Total Volatile Solids	
Surfactants	Aqueous Extractable Organics- ALL	
Sulfite	Unpreserved VOC's	
En Core Preservation	Ash	
Color		

Organic Data Qualifiers

- B Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis
- C Elevated detection limit (see Sample Narrative)
- D Analyte value from diluted analysis
- E Analyte concentration exceeds calibration range (see Sample Narrative)
- F Surrogate results outside control criteria or not available due to sample dilution
- H(n) Extraction or analysis performed "n" days past holding time
- J Qualitative evidence of analyte present. concentration detected is greater than the method detection limit but less than the reporting limit
- K Detection limit may be elevated due to the presence of an unrequested analyte (see Sample Narrative)
- N Spiked sample recovery not within control limits
- P The relative percent difference between the two columns for detected concentrations was greater than 40%
- Q The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range
- S The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit
- U The analyte was not detected above the reporting limit
- W Sample received with headspace.
- X See Sample Narrative
- & Laboratory Control Spike recovery not within control limits
- \* Duplicate analyses not within control limits
- SUB1 Assay was subcontracted to an approved lab
- SUB2 Assay was subcontracted to En Chem Green Bay WI Cert #405132750

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE1-T1 (40"-50")	Collection Date	9/12/02
Lab Sample Number	923070-001	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 1800	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 1800	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 1800	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1242	4800	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 1800	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1254	2300	1800	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 1800	1800	ug/kg		9/27/02	SW846 8082
Total PCBs	7100	1800	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID · WOODSIDE1-T2 (54"-71") Collection Date 9/12/02  
Lab Sample Number 923070-002 Matrix SEDIMENT  
Lab Project Number : 923070 WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	Analysis Date	Analysis Method
Analyt	Result	EQL	Units	Code			
Aroclor 1016	< 1400	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1221	< 1400	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1232	< 1400	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1242	5000	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1248	< 1400	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1254	2000	1400	ug/kg			9/27/02	SW846 8082
Aroclor 1260	1100	1400	ug/kg	J		9/27/02	SW846 8082
Total PCBs	7000	1400	ug/kg			9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number : 70923 09                      Report Date 10/9/02  
Sample ID WOODSIDE1-T3 (0"-40")                      Collection Date 9/12/02  
Lab Sample Number : 923070-003                      Matrix SEDIMENT  
Lab Project Number . 923070                      WI DNR LAB ID . 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1242	270	60	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1254	150	60	ug/kg		9/27/02	SW846 8082
Aroclor 1260	61	60	ug/kg		9/27/02	SW846 8082
Total PCBs	470	60	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE1-T4 (0"-64")	Collection Date	9/12/02
Lab Sample Number	923070-004	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Semivolatile Organic Results**

PCB LIST	Prep Method	SW846 3550	Prep Date.	9/17/02
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Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 68	68	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 68	68	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 68	68	ug/kg		9/27/02	SW846 8082
Aroclor 1242	140	68	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 68	68	ug/kg		9/27/02	SW846 8082
Aroclor 1254	170	68	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 68	68	ug/kg		9/27/02	SW846 8082
Total PCBs	310	68	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE2-T1 (0"-11.5")	Collection Date	9/12/02
Lab Sample Number	923070-005	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method		Prep Date	Analysis	
Analyt	Result	EQL	Units	Code	Date	Method
Aroclor 1016	< 110	110	ug/kg		10/3/02	SW846 8082
Aroclor 1221	< 110	110	ug/kg		10/3/02	SW846 8082
Aroclor 1232	< 110	110	ug/kg		10/3/02	SW846 8082
Aroclor 1242	590	110	ug/kg		10/3/02	SW846 8082
Aroclor 1248	< 110	110	ug/kg		10/3/02	SW846 8082
Aroclor 1254	610	110	ug/kg		10/3/02	SW846 8082
Aroclor 1260	93	110	ug/kg	J	10/3/02	SW846 8082
Total PCBs	1200	110	ug/kg		10/3/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name . SCHLUMBERGER - 12 MILE CREEK                      Submitter . RMT - GREENVILLE  
Project Number . 70923 09                      Report Date 10/9/02  
                    Sample ID : WOODSIDE2-T1 (11 5"-40")                      Collection Date 9/12/02  
Lab Sample Number . 923070-006                      Matrix SEDIMENT  
Lab Project Number 923070                      WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 65	65	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 65	65	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 65	65	ug/kg		9/27/02	SW846 8082
Aroclor 1242	59	65	ug/kg	J	9/27/02	SW846 8082
Aroclor 1248	< 65	65	ug/kg		9/27/02	SW846 8082
Aroclor 1254	75	65	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 65	65	ug/kg		9/27/02	SW846 8082
Total PCBs	75	65	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID : WOODSIDE2-T1 (40"-64")		Collection Date	9/12/02
Lab Sample Number :	923070-007	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Semivolatile Organic Results**

**PCB LIST**

Prep Method: SW846 3550

Prep Date: 9/17/02

Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 250	250	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 250	250	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 250	250	ug/kg		9/27/02	SW846 8082
Aroclor 1242	300	250	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 250	250	ug/kg		9/27/02	SW846 8082
Aroclor 1254	440	250	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 250	250	ug/kg		9/27/02	SW846 8082
Total PCBs	740	250	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number :	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE2-T2 (0"-18")	Collection Date	9/12/02
Lab Sample Number	923070-008	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

**Semivolatile Organic Results**

**PCB LIST**

Prep Method: SW846 3550

Prep Date 9/17/02

Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 330	330	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 330	330	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 330	330	ug/kg		9/27/02	SW846 8082
Aroclor 1242	650	330	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 330	330	ug/kg		9/27/02	SW846 8082
Aroclor 1254	610	330	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 330	330	ug/kg		9/27/02	SW846 8082
Total PCBs	1300	330	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number 70923 09                      Report Date 10/9/02  
                    Sample ID . WOODSIDE2-T2 (55"-70")                      Collection Date 9/12/02  
Lab Sample Number 923070-009                      Matrix SEDIMENT  
Lab Project Number 923070                      WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method: SW846 3550		Prep Date 9/17/02		
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 220	220	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 220	220	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 220	220	ug/kg		9/27/02	SW846 8082
Aroclor 1242	1100	220	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 220	220	ug/kg		9/27/02	SW846 8082
Aroclor 1254	770	220	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 220	220	ug/kg		9/27/02	SW846 8082
Total PCBs	1900	220	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number 70923 09                      Report Date 10/9/02  
Sample ID WOODSIDE2-T3 (0"-18")                      Collection Date 9/12/02  
Lab Sample Number . 923070-010                      Matrix . SEDIMENT  
Lab Project Number 923070                      WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

**PCB LIST**

Prep Method SW846 3550

Prep Date 9/17/02

Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 62	62	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 62	62	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 62	62	ug/kg		9/27/02	SW846 8082
Aroclor 1242	< 62	62	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 62	62	ug/kg		9/27/02	SW846 8082
Aroclor 1254	48	62	ug/kg	J	9/27/02	SW846 8082
Aroclor 1260	< 62	62	ug/kg		9/27/02	SW846 8082
Total PCBs	< 62	62	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID WOODSIDE2-T3 (51"-68") Collection Date 9/12/02  
Lab Sample Number 923070-011 Matrix SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

**Semivolatile Organic Results**

PCB LIST		Prep Method. SW846 3550		Prep Date 9/17/02		
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 140	140	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 140	140	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 140	140	ug/kg		9/27/02	SW846 8082
Aroclor 1242	380	140	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 140	140	ug/kg		9/27/02	SW846 8082
Aroclor 1254	300	140	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 140	140	ug/kg		9/27/02	SW846 8082
Total PCBs	680	140	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number : 70923 09                      Report Date 10/9/02  
                    Sample ID WOODSIDE2-T4 (12"-29")                      Collection Date . 9/12/02  
Lab Sample Number : 923070-012                      Matrix . SEDIMENT  
Lab Project Number : 923070                      WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method SW846 3550		Prep Date 9/17/02		
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 160	160	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 160	160	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 160	160	ug/kg		9/27/02	SW846 8082
Aroclor 1242	350	160	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 160	160	ug/kg		9/27/02	SW846 8082
Aroclor 1254	420	160	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 160	160	ug/kg		9/27/02	SW846 8082
Total PCBs	770	160	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID EASLEY CENTRAL-T1 (0"-24") Collection Date 9/12/02  
Lab Sample Number : 923070-013 Matrix SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST	Prep Method	SW846 3550	Prep Date	9/17/02		
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1242	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1254	31	58	ug/kg	J	9/27/02	SW846 8082
Aroclor 1260	< 58	58	ug/kg		9/27/02	SW846 8082
Total PCBs	< 58	58	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted.  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number 70923 09                      Report Date 10/9/02  
                    Sample ID . EASLEY CENTRAL-T1 (42"-62")              Collection Date 9/12/02  
Lab Sample Number 923070-014                      Matrix SEDIMENT  
Lab Project Number 923070                      WI DNR LAB ID . 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1242	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 57	57	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 57	57	ug/kg		9/27/02	SW846 8082
Total PCBs	< 57	57	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID . EASLEY CENTRAL-T2 (54"-84") Collection Date 9/12/02  
Lab Sample Number . 923070-015 Matrix . SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

**Semivolatile Organic Results**

PCB LIST

Prep Method SW846 3550

Prep Date. 9/17/02

Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1242	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 59	59	ug/kg		9/27/02	SW846 8082
Total PCBs	< 59	59	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T2 (100"-117")	Collection Date	9/12/02
Lab Sample Number	923070-016	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Semivolatile Organic Results**

PCB LIST	Prep Method	SW846 3550	Prep Date.	9/17/02
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Analyst	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1242	120	59	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 59	59	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 59	59	ug/kg		9/27/02	SW846 8082
Total PCBs	120	59	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted.

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter : RMT - GREENVILLE  
Project Number 70923 09                      Report Date : 10/9/02  
Sample ID EASLEY CENTRAL-T3 (56"-71")                      Collection Date 9/12/02  
Lab Sample Number 923070-017                      Matrix SEDIMENT  
Lab Project Number 923070                      WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method SW846 3550		Prep Date 9/17/02		
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1242	68	60	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 60	60	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 60	60	ug/kg		9/27/02	SW846 8082
Total PCBs	68	60	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID EASLEY CENTRAL-T4 (21"-36") Collection Date 9/12/02  
Lab Sample Number 923070-018 Matrix : SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

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**Semivolatile Organic Results**

PCB LIST

Prep Method: SW846 3550

Prep Date: 9/17/02

Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1242	28	58	ug/kg	J	9/27/02	SW846 8082
Aroclor 1248	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 58	58	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 58	58	ug/kg		9/27/02	SW846 8082
Total PCBs	< 58	58	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T4 (36"-55")	Collection Date	9/12/02
Lab Sample Number	923070-019	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	. 113172950

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**Semivolatile Organic Results**

PCB LIST		Prep Method	SW846 3550	Prep Date	9/17/02	
Analyt	Result	EQL	Units	Code	Analysis Date	Analysis Method
Aroclor 1016	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1221	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1232	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1242	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1248	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1254	< 56	56	ug/kg		9/27/02	SW846 8082
Aroclor 1260	< 56	56	ug/kg		9/27/02	SW846 8082
Total PCBs	< 56	56	ug/kg		9/27/02	SW846 8082

All soil results are reported on a dry weight basis unless otherwise noted  
Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter : RMT - GREENVILLE  
Project Number : 70923 09                      Report Date : 10/9/02  
Sample ID : WOODSIDE1-T1 (40"-50")                      Collection Date : 9/12/02  
Lab Sample Number : 923070-001                      Matrix : SEDIMENT  
Lab Project Number : 923070                      WI DNR LAB ID : 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	55 3		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name . SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID WOODSIDE1-T2 (54"-71") Collection Date 9/12/02  
Lab Sample Number 923070-002 Matrix SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	73.8		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID : WOODSIDE1-T3 (0"-40") Collection Date 9/12/02  
Lab Sample Number 923070-003 Matrix SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	83.7		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name · SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number · 70923 09                      Report Date 10/9/02  
Sample ID WOODSIDE1-T4 (0"-64")                      Collection Date 9/12/02  
Lab Sample Number · 923070-004                      Matrix SEDIMENT  
Lab Project Number . 923070                      WI DNR LAB ID . 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	73 3		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE2-T1 (0"-11 5")	Collection Date	9/12/02
Lab Sample Number	923070-005	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	43 6		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date . 10/9/02  
Sample ID . WOODSIDE2-T1 (11 5"-40") Collection Date . 9/12/02  
Lab Sample Number : 923070-006 Matrix : SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	76 8		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter : RMT - GREENVILLE  
Project Number : 70923 09                      Report Date : 10/9/02  
Sample ID : WOODSIDE2-T1 (40"-64")                      Collection Date : 9/12/02  
Lab Sample Number : 923070-007                      Matrix : SEDIMENT  
Lab Project Number : 923070                      WI DNR LAB ID : 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	60.4		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE2-T2 (0"-18")	Collection Date	9/12/02
Lab Sample Number	923070-008	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	. 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	61.3		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID : WOODSIDE2-T2 (55"-70") Collection Date 9/12/02  
Lab Sample Number 923070-009 Matrix : SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	68 5		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name .	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	WOODSIDE2-T3 (0"-18")	Collection Date	9/12/02
Lab Sample Number	923070-010	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

---

**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	80.5		%		9/16/02	SM2540G-MOD	SM2540G-MOD

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID WOODSIDE2-T3 (51"-68") Collection Date : 9/12/02  
Lab Sample Number 923070-011 Matrix SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	69 9		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name : SCHLUMBERGER - 12 MILE CREEK                      Submitter RMT - GREENVILLE  
Project Number 70923 09                      Report Date 10/9/02  
Sample ID : WOODSIDE2-T4 (12"-29")                      Collection Date . 9/12/02  
Lab Sample Number 923070-012                      Matrix SEDIMENT  
Lab Project Number . 923070                      WI DNR LAB ID 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	64 5		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted.

**- Analytical Report -**

Project Name . SCHLUMBERGER - 12 MILE CREEK Submitter RMT - GREENVILLE  
Project Number . 70923 09 Report Date 10/9/02  
Sample ID . EASLEY CENTRAL-T1 (0"-24") Collection Date . 9/12/02  
Lab Sample Number 923070-013 Matrix SEDIMENT  
Lab Project Number . 923070 WI DNR LAB ID 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	86 1		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T1 (42"-62")	Collection Date	9/12/02
Lab Sample Number	923070-014	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	. 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	87 7		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T2 (54"-84")	Collection Date	9/12/02
Lab Sample Number	. 923070-015	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	84.5		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name SCHLUMBERGER - 12 MILE CREEK Submitter : RMT - GREENVILLE  
Project Number 70923 09 Report Date 10/9/02  
Sample ID EASLEY CENTRAL-T2 (100"-117) Collection Date 9/12/02  
Lab Sample Number . 923070-016 Matrix . SEDIMENT  
Lab Project Number 923070 WI DNR LAB ID : 113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	84 1		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T3 (56"-71")	Collection Date	9/12/02
Lab Sample Number	923070-017	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	83.9		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T4 (21"-36")	Collection Date	9/12/02
Lab Sample Number	923070-018	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	86.6		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery. All recoveries pass in-house control limits unless otherwise noted

**- Analytical Report -**

Project Name	SCHLUMBERGER - 12 MILE CREEK	Submitter	RMT - GREENVILLE
Project Number	70923 09	Report Date	10/9/02
Sample ID	EASLEY CENTRAL-T4 (36"-55")	Collection Date	9/12/02
Lab Sample Number	923070-019	Matrix	SEDIMENT
Lab Project Number	923070	WI DNR LAB ID	113172950

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**Inorganic Results**

Analyte	Result	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method
Solids, percent	89.9		%		9/16/02	SM 2540G M	SM 2540G M

Units of %Recov(ery) denote spike recovery All recoveries pass in-house control limits unless otherwise noted

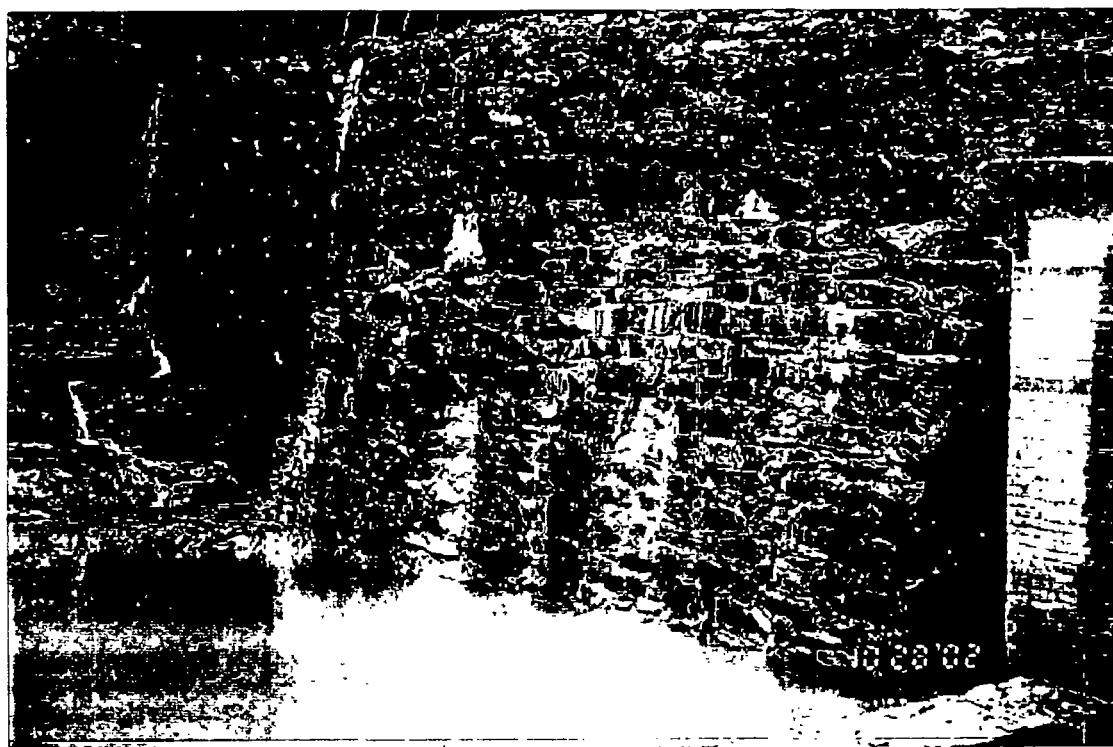
# **Appendix G**

## **Photographs**

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Photograph 1    Woodside II Dam



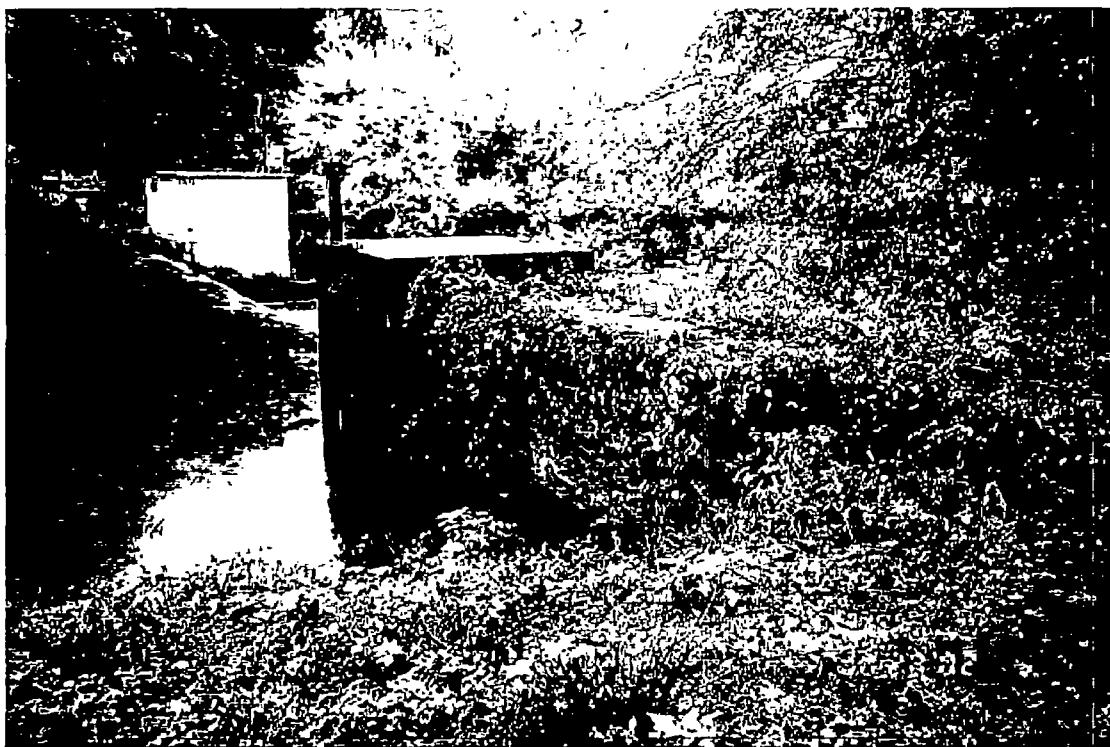
Photograph 2    Woodside II Dam



Photograph 3    Woodside II Dam



Photograph 4 Easley Central Water District Dam.



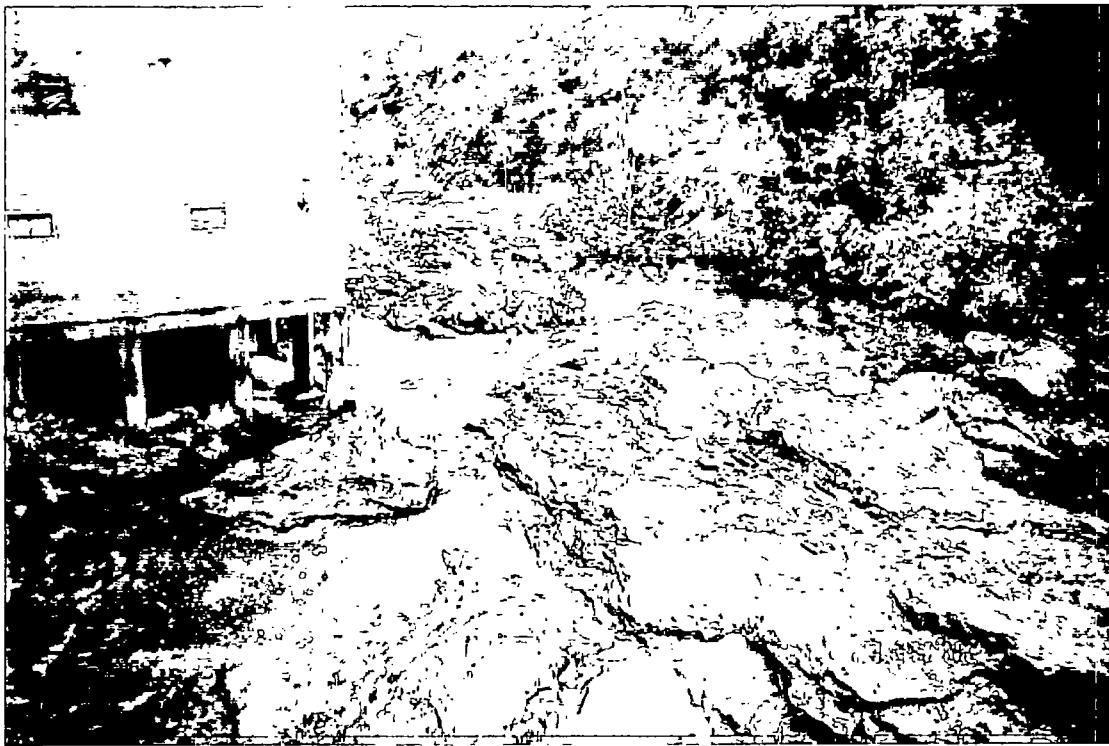
Photograph 5 Easley Central Water District Dam



Photograph 6      Easley Central Water District Dam



Photograph 7    Woodside I Dam



Photograph 8 View downstream of Woodside I Dam



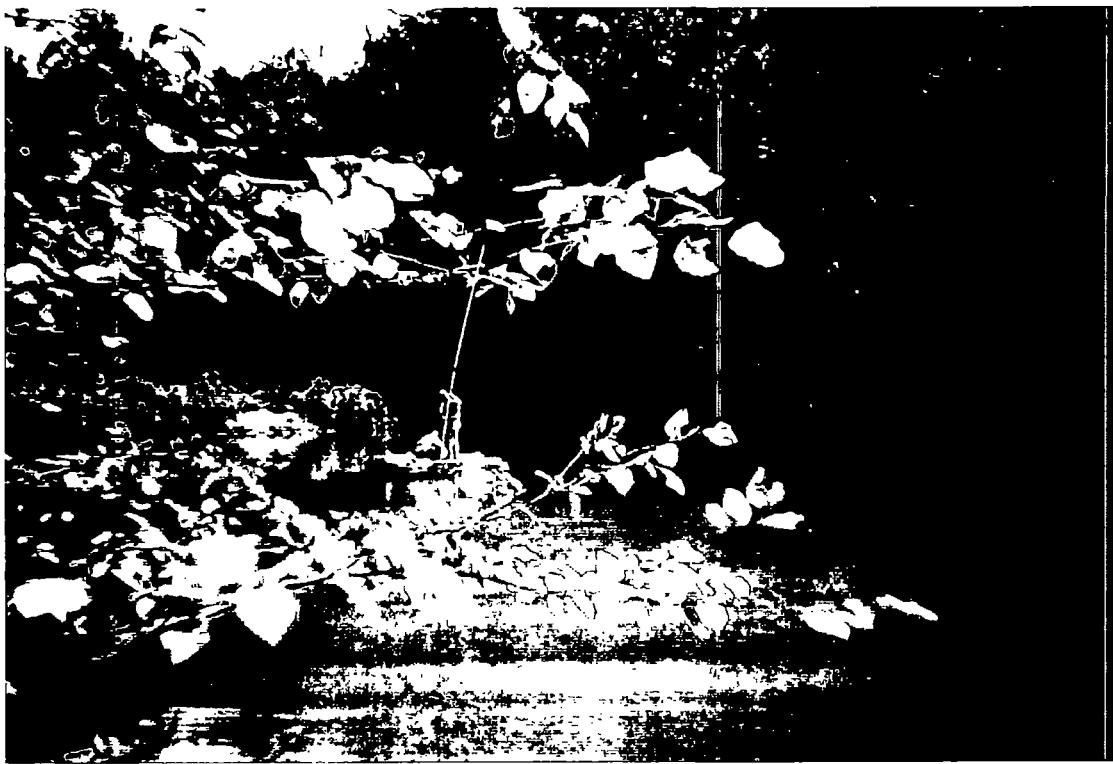
Photograph 9 View upstream of Woodside II Reservoir during low water conditions



Photograph 10 Sampling in Woodside I Reservoir.



Photograph 11 View downstream to Woodside II reservoir during low water conditions



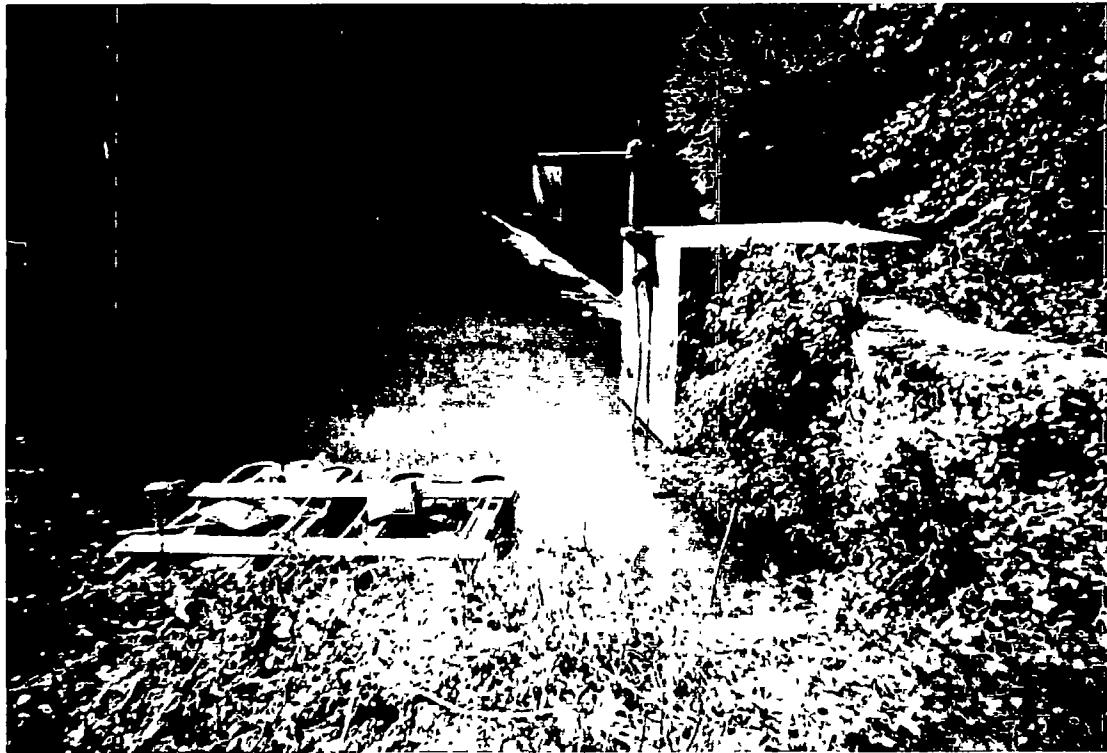
Photograph 12 Sampling in Easley Central Water District Reservoir



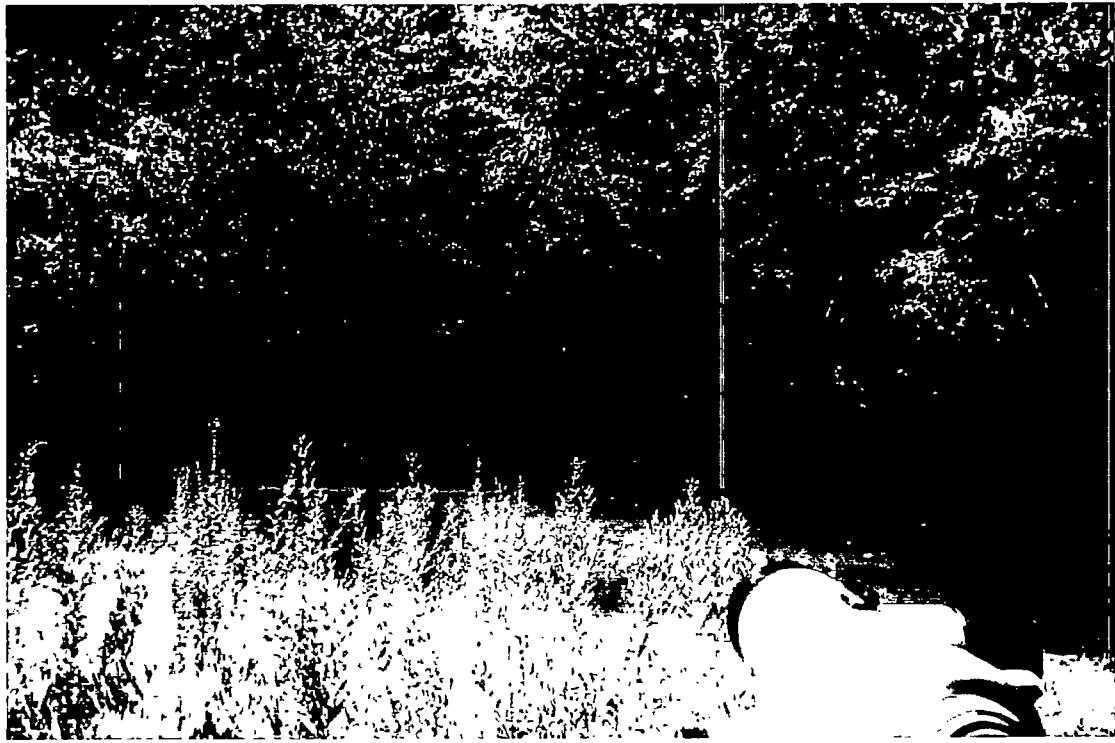
Photograph 13 Settling level prior to establishing profile in Twelve Mile Creek



Photograph 14. Sampling in Easley Central Water District Reservoir



Photograph 15 View of sampling platform and Easley Central Water District



Photograph 16 Establishing transect in Twelve Mile Creek



Photograph 17. Establishing transect in Twelve Mile Creek

## **Appendix H**

### **Surveying Data**

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Appendix H  
Surveying Data

85,1075828.566510,1468166.986020,784.54,SPILLWAY  
88,1076145.473300,1468178.641380,784.76,WATERLINE  
89,1074787.057660,1465646.717230,762.04,FLAG TREE  
90,1074787.919190,1465648.801530,760.11,WATERLINE  
91,1074788.093310,1465644.408160,762.95,IRS WS1 T-1A  
92,1074884.637990,1465758.179110,762.68,IRS WS1 T-2A  
93,1074879.731840,1465760.575720,760.14,WATERLINE  
94,1074738.440650,1465644.332800,737.06,BEDROCK  
96,1074942.870430,1465859.152750,762.61,IRS WS1 T-3A  
97,1074937.616730,1465860.702160,760.09,WATERLINE  
98,1074962.981480,1465894.033310,763.60,IRS WS1 T-4A  
99,1074958.417570,1465894.867380,761.10,WATERLINE  
100,1074710.772970,1465744.179730,760.11,SPILLWAY  
121,1074685.409250,1465821.400640,761.79,IRS WS1 T-1  
122,1074685.705700,1465820.986780,760.11,WATERLINE  
123,1074724.157450,1465883.055220,762.27,IRS WS1 T-2  
124,1074727.105600,1465882.432440,760.18,WATERLINE  
126,1074773.680570,1465951.809150,762.21,SPIKENAIL  
127,1074768.622160,1465954.579370,763.62,IRS WS1 T-3  
128,1074816.935270,1466052.523200,763.54,IRS WS1 T-4  
129,1074821.475170,1466049.515540,760.03,WATERLINE  
132,1075043.146080,1466716.505930,760.06,5C-WATERLINE  
133,1075034.108600,1466720.091110,763.50,5C-IRS1/2"  
134,1075159.732820,1466675.416510,763.75,5C-IRS1/2"  
135,1075155.412010,1466677.636250,759.85,5C-WATERLINE  
138,1073499.541210,1464125.677230,721.47,IRS 2C  
139,1073511.403580,1464120.958170,716.96,WATERLINE  
140,1073596.538020,1464065.577650,717.07,WATERLINE  
141,1073599.220260,1464063.889840,721.88,IRS 2C  
142,1073791.935270,1465064.400230,717.80,WATERLINE  
143,1073797.135880,1465064.486690,721.20,IRS 3C  
144,1073707.574460,1465062.843320,717.64,WATERLINE  
145,1073700.703050,1465063.974370,722.42,IRS 3C  
150,1074578.399650,1465676.905990,729.16,4C "X" ON COLUM  
151,1074576.596730,1465669.397270,728.97,IRF SPIKE  
153,1074547.107750,1465547.002290,729.86,PAINTED ROCK  
154,1074537.659320,1465515.200680,746.03,IRS 4C  
156,1071751.403960,1461852.898610,717.39,WATERLINE  
157,1071754.458450,1461851.764360,719.58,IRS 1C  
158,1071605.594730,1461949.639170,729.26,IRS 1C  
159,1071611.860480,1461945.238070,717.39,WATERLINE  
162,1076409.825480,1470360.293460,794.71,IRS 11C  
163,1076401.917770,1470363.020740,785.83,WATERLINE  
164,1076336.731920,1470376.392100,785.91,IRF spike

165,1076315.620870,1470380.164420,789.40,IRF spike 11C  
166,1076321.461660,1470379.452840,785.82,WATERLINE  
200,1075787.018160,1468208.440430,784.78,WATERLINE  
201,1075783.444890,1468210.526970,788.11,FLAGTREE  
202,1075776.592030,1468215.814590,788.25,IRS EC T-1  
203,1075830.491030,1468280.994020,788.11,IRS EC T-2  
204,1075836.393490,1468278.907360,787.03,TOP BANK  
205,1075838.825760,1468277.345780,784.74,WATERLINE  
206,1076167.813120,1468258.662480,784.76,WATERLINE  
207,1076169.814410,1468267.277310,788.15,TOP BANK  
208,1076171.044500,1468270.528090,788.26,IRS EC T-4  
209,1075946.125200,1468308.542480,784.75,WATERLINE  
210,1075946.485800,1468310.564150,786.15,NF SPIKE  
211,1075943.572230,1468314.664370,787.06,TOP BANK  
212,1075937.572680,1468322.705730,787.05,IRS EC T-3  
213,1075793.022460,1468139.897500,772.88,BUILDING CORNER  
214,1075877.925510,1468127.897090,769.87,BEDROCK  
215,1075923.016290,1468052.824760,768.49,WATERLINE  
216,1075932.109630,1468044.894880,772.16,IRS 8-C  
217,1075973.663380,1468111.266250,784.61,WATERLINE  
218,1075979.302570,1468106.092020,789.33,IRS EC T-1A  
219,1075998.612400,1468135.159110,787.62,IRS EC T-2A  
220,1075996.152920,1468136.236370,786.77,TOP BANK  
221,1075994.687890,1468138.236060,784.57,WATERLINE  
222,1076063.358630,1468155.509980,788.79,IRS EC T-3A  
223,1076060.126500,1468160.483010,787.71,TOP BANK  
224,1076058.732450,1468163.134500,784.76,WATERLINE  
225,1076140.111250,1468159.373570,796.52,IRS EC T-4A  
227,1076555.742870,1468214.431060,789.28,IRS 9C  
228,1076547.822700,1468224.357850,788.30,TOP OF BANK  
229,1076545.807850,1468228.033360,786.56,NF SPIKE NAIL  
230,1076544.996740,1468228.823160,784.90,WATERLINE  
231,1076464.577750,1468334.154760,784.86,WATERLINE  
232,1076462.882920,1468336.406080,787.98,WOOD STAKE  
233,1076459.046450,1468343.553640,789.68,IRS 9C  
237,1074972.744910,1468024.453200,766.85,IRS 7C  
238,1074971.817940,1468019.688990,764.66,TOP BANK  
239,1074968.582230,1468013.414790,760.37,WATERLINE  
240,1074934.840290,1467909.797210,766.05,IRS 7C  
241,1074935.238340,1467912.249450,765.71,TOP BANK  
242,1074939.509880,1467919.132510,760.36,WATERLINE  
244,1074625.431850,1467635.306780,766.80,IRS 6C  
245,1074496.661370,1467629.240400,767.82,IRS 6C  
246,1074533.431700,1467628.498110,760.23,WATERLINE  
251,1077305.014480,1469199.955150,790.50,IRS 10C  
252,1077309.942100,1469197.983810,784.93,WATERLINE  
253,1077390.247120,1469169.704740,784.87,WATERLINE

254,1077395.707160,1469167.342370,791.32,IRS 10C  
255,1071987.813090,1462356.031230,717.21,RP  
256,1072042.130610,1462502.653390,721.05,IRS1-C  
257,1072047.884130,1462493.935710,717.17,WLVL  
258,1072133.183110,1462369.362280,722.19,IRS 1-C  
259,1072129.117760,1462372.490160,720.27,TB\*FLAG  
260,1072128.Q71100,1462373.486510,717.21,WLVL  
261,1071892.864630,1462096.238330,722.81,IRS T-4\*TB  
262,1071888.803030,1462100.416710,717.15,WLVL  
263,1071791.808670,1461943.264430,721.23,IRST-2-4.0LFTWL  
264,1071821.672680,1461985.931750,727.51,IRS T-3  
265,1071814.638890,1461989.081810,721.59,TB  
266,1071815.320810,1461991.502530,717.15,WLVL  
267,1071670.211940,1462033.465430,720.73,IRS T-2  
268,1071673.583720,1462030.430010,719.69,TB  
269,1071674.999750,1462029.152400,717.03,WLVL  
270,1071696.403210,1462099.616590,723.45,IRS T-3  
271,1071700.217950,1462097.284840,721.11,TB  
272,1071700.858400,1462091.266420,717.19,WLVL  
273,1071726.147180,1462165.404530,722.71,IRS T-4  
274,1071729.706900,1462163.441110,720.51,TB  
275,1071730.614790,1462159.714880,717.15,WLVL  
276,1071662.830480,1461885.598200,717.35,TDAM  
277,1071662.830480,1461885.598200,679.16,BEDROCK  
278,1071788.596077,1461945.647546,717.03,WATERLN